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ABSTRACT

A 2-year study of minority group barriers to allied health careers in the Southwest was conducted to identify those barriers experienced by minority groups in entering and completing a postsecondary educational program in allied health. Data were obtained through: (1) 7 one-day conferences convening students, dropouts, nonstudents, staff, faculty, and administrators held in Arizona, California, Colorado, New Mexico, Oklahoma, and Texas; and (2) an examination of demographic and health manpower data. Conference participants ranked, by priority, the barriers according to their importance to each minority group (Spanish Americans, American Indians, and Black Americans). Findings were presented by categories of barriers and the stages in the process of acquiring professional status (application, matriculation, and completion). This final report presents: (1) an overview of the study, (2) brief descriptions of each phase of the study, (3) a summary of each conference, (4) a summary of the barriers and priority rankings for each geographic area, (5) a synopsis of the barriers and recommendations, (6) a statement of conclusions based on the study's findings as compared with the findings of other investigations regarding minority allied health professionals and students in the Southwest. (NQ)

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BARRIERS TO ALLIED HEALTH
PROFESSIONS EDUCATION
IN THE SOUTHWEST



Southwest Program Development Corp.

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RC 008971

FINAL REPORT
(CONTRACT NO. 1-AH-34087)

A NATIONAL STUDY OF MINORITY GROUP
BARRIERS TO ALLIED HEALTH
PROFESSIONS EDUCATION
IN THE SOUTHWEST

SUPPORTED BY

THE DIVISION OF ASSOCIATED HEALTH PROFESSIONS
BUREAU OF HEALTH MANPOWER
HEALTH RESOURCES ADMINISTRATION
PUBLIC HEALTH SERVICE
DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
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AUGUST 1975

PREFACE

A two-year study of minority group barriers to allied health careers in the southwest¹ was conducted by Southwest Program Development Corporation under contract to the Department of Health, Education and Welfare, Bureau of Health Manpower. The purpose of the study was to identify those barriers or obstacles experienced by minority groups in entering and completing a post-secondary educational program in allied health. The methodology included an examination of demographic and health manpower data, and discussion sessions which involved faculty, administrators, and other staff, and students and ex-students.

The study findings are presented by categories of barriers and the stages in the process of acquiring professional status; namely, application, matriculation and completion. The principal findings regarding priority barriers are summarized below.

1. The faculty sessions ranked the lack of appropriate counseling at the high school level, minority student failure to meet institutional and programmatic admission requirements, financial need, and the lack of basic skills in verbal and written communication, the sciences and mathematics as priority barriers.
2. The student sessions ranked financial need and the lack of financial aid, high school counseling, the allied health curriculum structure and

¹The geographic contract area included Arizona, California, Colorado, New Mexico, Oklahoma and Texas

course content, bias against and stereotyping of minorities by faculty and staff, admission requirements, and academic preparation as priority barriers.

With respect to the stages involved in achieving professional status in an allied health career, the faculty and students agreed that the most serious barriers occurred in the application stage, with faculty considering both matriculation and completion as including barriers of equal weight and the students citing completion barriers as second ranking and matriculation barriers as third ranking.

The contractor recommends that the Department of Health, Education and Welfare, Bureau of Health Manpower, should develop and implement action strategy to address the following issues: the lack of knowledge and awareness of the allied health professions by counselors and teachers, parents and students; the lack of financial aid for minorities in allied health programs; the lack of uniformity in curriculum, licensure and salary scales for allied health professions; the lack of compliance to affirmative action legislation by post-secondary education institutions; the use of culturally biased testing instruments; the lack of inter-institutional coordination regarding allied health curriculum and course content; and the lack of tutorial programs and supportive services designed to meet minority student needs.

The contractor also recommends that a study be

conducted by the Bureau of Health Manpower to ascertain the impact of rural and urban residency on the number of minorities in allied health programs in order to insure that programmatic efforts to increase allied health manpower impact ethnic minority members. To this end, the Department of Health, Education and Welfare should give immediate attention to moving HR 3270, "The Career Guidance and Counseling Act of 1975," out of committee this year.

The contractor wishes to acknowledge the invaluable assistance provided by the host institutions and by participants in conducting the last phase of this study; namely, the discussion sessions. In particular, the following individuals were instrumental in organizing conference participations: Dr. Hank Oyama and Mr. Don Proulx, Pima Community College; Mr. Augustine Chavez, San Diego State University; Mr. Catarino Martinez, Colorado University Medical Center; Dr. Alonzo Atencio and Mrs. Sally Yguado, University of New Mexico; Dr. Charles Cameron, University of Oklahoma Health Science Center; Mrs. Mary Watts, El Centro College; and Mrs. Peggy Powers, St. Philip's College.

The project director wishes to acknowledge the assistance received by numerous staff members of Southwest Program Development Corporation who participated in the conduct of this study especially; Jude Valdez, Mayme Williams, Henry Travieso, Roberto Garcia and Martha Reyes.

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Acknowledgement is also made of the assistance provided by Lorraine J. Gordon, Project Coordinator, M-BIC of the American Society of Allied Health Professions.

A special acknowledgement is given to the project officer from the Bureau of Health Resources Development, Donald R. Buckner, for his contribution to the successful completion of the study.

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INTRODUCTION

In 1973 the Bureau of Health Manpower, the then Bureau of Health Manpower Education,² of the Division of Associated Health Professions of the Department of Health, Education and Welfare (DHEW), solicited proposals³ for conducting a study to identify those barriers experienced by minority individuals in entering and completing a post-secondary educational program in allied health and to recommend solutions to reduce barriers and thereby promote increased enrollments of minorities in allied health professions education programs.

Reference was made in the bid for proposal to several evaluative studies and programmatic efforts previously or then being funded by the Division of Allied Health Manpower that focused on the education and training of minority allied health professions personnel.

1. The Division of Allied Health Manpower sponsored a contract study in 1970 to evaluate the effectiveness of the Basic Improvement Grants program which had been administered

²This change was effected in May 1975.

³U.S., Department of Health, Education and Welfare, Public Health Service, National Institute of Health, Bureau of Health Manpower Education, Request for Proposal No. 1-AH-34087, Attachment A, April 30, 1973.

since 1967 under the Allied Health Professions Personnel Training Act of 1966. This study was undertaken as part of the DHEW program evaluation schema to aid in planning the future federal role in the education and training of allied health professions personnel. The final report, Impact of the Allied Health Basic Improvement Grant Program on Health Occupations Programs (Contract Number 70-4172), dated July 31, 1971, recommends an examination of the barriers to enrollment for Black Americans. This study was of particular interest to DHEW inasmuch as the Division of Allied Health Manpower, Bureau of Health Manpower Education, had identified minorities as one of the priority concerns for governmental attention with respect to allied health education and training programs.

2. In another study, the Office for Civil Rights reported in 1968 that Black-American and Spanish-American students comprised a range of only 1 to 3% of undergraduates enrolled in federally funded institutions of higher education. A significant potential manpower pool for allied health professions is represented by these minority groups. In order to fully explore this potential source of allied health manpower, the Division supported bi-lateral efforts (1) to develop allied health training and education programs in schools with a traditionally minority population and (2) to increase the minority enrollment in allied health programs in predominantly white institutions. To this end, the Division of Allied Health Manpower had contracted with the National Urban League, Inc., to identify potential Black colleges and universities with an interest in allied health education programs and to seek out the financial support for planning, initiating or expanding allied health education programs at these institutions.
3. A subcommittee of the American Society of Allied Health Professions charged with the responsibility of recommending strategies to recruit minorities into allied health professions suggested that intensified efforts should be made to recruit and retain Black-Americans, Spanish-Americans and Indian-Americans in allied health education programs throughout the Northeast,

Southeast, and the Southwest areas of the United States.⁴

In light of efforts within the Division and the above suggestions, the Division of Allied Health Manpower recognized that there existed a need relationship between health services delivery programs which are short of trained personnel and untapped reservoirs of potential health care personnel in minority communities who may be excluded from educational opportunities by barriers as yet unidentified.

In June 1973, the Bureau of Health Manpower let contracts to conduct a two year study to identify barriers that tend to prevent entry into and completion of allied health professions postsecondary education by minorities.

The study was divided into three geographic contract areas to cover the Northeast, Southeast, and Southwest United States. It was contracted out to three research organizations. In addition, a professional organization was contracted to coordinate the study implementation and the findings report.

Southwest Program Development Corporation of San Antonio, Texas, was contracted to conduct the study in the Southwest United States. This geographic area includes the states of Arizona, California, Colorado, New Mexico, Oklahoma, and Texas.

This final report of the study presents an overview.

⁴Ibid.

of the study in Chapter I and briefly describes each of the three phases of the study in Chapter 2. In Chapter 3, input from each of seven area conferences conducted as part of the third phase of the study are summarized, and the study population identified and described. In Chapter 4, the barriers and priority rankings for the geographic contract area are summarized. Chapter 5 presents a synopsis of the barriers and recommendations proposed by the contractor. Chapter 6 sets forth a statement of conclusions based on this study's findings as compared with the study findings of other investigations regarding minority allied health professionals and students in the Southwest United States.

CHAPTER I. OVERVIEW

PURPOSE

The purpose of the study was contractually defined as determining and assessing barriers to (1) making application to post-secondary allied health professional education programs, (2) actual matriculation affecting those who do make application, and (3) successful program completion by those who matriculate. The ranking of barriers, by priority, according to their importance to each minority group was included in the assessment of the barriers defined by the study. Additionally, information was to be obtained on those barriers affecting minority individuals (1) who have been discouraged from seeking formal admission and have not obtained post-secondary education in allied health fields, or (2) have unsuccessfully sought to enter such programs, or (3) have matriculated but failed to complete such programs.

OBJECTIVES

Four specific objectives for the study were established by the Bureau of Health Manpower as follows: (1) to devise appropriate methodologies for the identification of barriers which tend to prevent or limit entry into or

completion of post-secondary allied health professions educational programs by three minority groups: Black-Americans, Spanish-Americans, and Indian-Americans; (2) to apply methodologies to the identification of barriers affecting minority groups in the Southwestern United States; namely the states of Texas, Oklahoma, Arizona, California (Los Angeles and south), Colorado and New Mexico; (3) to summarize the findings; and (4) to recommend approaches that will facilitate the attainment of equal representation by minority group members in allied health professions educational programs.

Definition of "Barriers"

Barriers, as used in this study, include those attitudes and practices which act upon minority population groups to prevent, hinder, constrain, or discourage educational achievements in post-secondary allied health fields. The contract stipulated that a distinction should be made between (1) barriers which are resolved or reduced through programs for the recruitment and training of allied health manpower, and (2) barriers that constitute basic social or economic problems, which are not susceptible to attack or solution by allied health manpower authorities independently of widespread national reforms through broad social, economic, or legislative action. As an example of foregoing, family poverty during early childhood may have widespread ramifications on later attitudes, abilities,

and opportunities of affected individuals. The intent of this study was not to identify early poverty as a barrier and to recommend ways in which family poverty during childhood may be overcome, but to consider the resultant individual characteristics and problems as, in later life, they specifically affect (1) the individual's need and ability to find sources of financial assistance for training, (2) the individual's motivation to seek an allied health career, (3) the need for the provision of specific additional training in preparation for matriculation in educational programs, and (4) other phenomena which feasibly can be addressed by programs geared specifically to increasing minority group participation in allied health professions' education.

Definition of "Allied Health Professions"

The term "allied health professions," as used in this contract, included the following fields or occupations.

Medical Technologist
Optometric Technologist
Dental Hygienist
Radiologic Technologist
Medical Record Librarian
(Medical Records
Administration)
Dietitian
Occupational Therapist
Physical Therapist
Sanitarian

X-Ray Technician
Medical Record Technician
Inhalation Therapy Technician
Dental Laboratory Technician
Sanitarian Technician
Dental Assistant
Ophthalmic Assistant
Occupational Therapy Assistant
Dietary Technician
Medical Laboratory Technician
Optometric Technician

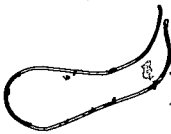
SCOPE

The contractor was enjoined to collect, analyze and summarize available information and existing data relevant to the extent to which minority group barriers exist in the area of post-secondary education for the allied health professions in the Southwestern United States. Statistical profiles of students in secondary and higher educational institutions and of employed allied health workers were to be collected and summarized, and an annotated bibliography of published and unpublished materials prepared prior to developing the methodology or methodologies for source data collection from allied health programs, program directors and minority students.⁵

The areas to be explored in the source data collection phase of the study included, but were not limited to, (1) costs and sources of financial aid including necessity to work while in training; (2) how adequately students have been prepared for post-secondary allied health occupations education including, but not limited to, educational background, high school academic standing, and college entrance examination performance; (3) how students are recruited to and/or discouraged from allied health occupations including,

⁵Including non-applicants, unsuccessful applicants, and ex-students.

but not limited to, awareness of allied health careers, experience with counseling, guidance, accessibility of ethnic and non-ethnic role models and geographic accessibility of educational programs; (4) minority student learning-related problems as perceived by participants, or difficulty in communicating with faculty problems affecting the learning environment, such as housing and commuting time; and (5) student perceptions of allied health careers including prestige, work environment, prospects for employment, income potential and other adverse problems.



CHAPTER II. STUDY PHASES

A three-phased approach for accomplishing the study over a two-year period was implemented by the contractor. A brief description of the work accomplished and the methodologies used in each phase of the study are discussed below.

PHASE I

The contractor conducted an in-depth review and analysis of existing literature and relevant studies, and compiled an annotated bibliography⁶ of published and unpublished literature pertinent to the objectives of the study. The bibliography contains 223 annotations of published and unpublished literature of the past five years and contains two sections. The first section contains those references which address national issues, and the second section contains those references that address issues pertinent to the Southwest. Various resources were utilized including the Educational Resources Information Center (ERIC), the Clearinghouse on the Disadvantaged at

⁶Southwest Program Development Corporation, "Minorities and Allied Health: An Annotated Bibliography", Prepared for the Bureau of Health Resources Development of the Department of Health, Education and Welfare, Under Contract No. 1-AH-34087 (September 1973).

Columbia University, Medlars, the Council of Research and Academic Libraries (CORAL) of Texas, local and regional health manpower agencies in Texas, Oklahoma, Southern California, New Mexico, Colorado, and Arizona, and other professional associations.

The contractor also prepared a two part report of the participation of minority groups in allied health education in the Southwest entitled "Minorities and Allied Health".⁷ The first part consists of an analysis of relevant literature and the second part analyzes allied health student enrollment and allied health workers in the geographic contract area. In the first part of the report, "An Analysis of the Relevant Literature", existing literature on the barriers to minorities seeking post-secondary education and, more specifically, allied health careers is examined. A variety of research methodologies and designs were employed by the authors cited which ranged from interviews, conferences, and surveys, to sophisticated multi-year studies throughout the United States. The scope of the studies varied from an examination of a particular barrier experienced by minorities in entering post-secondary education, to a general discussion of barriers experienced by a particular minority group.

⁷Southwest Program Development Corporation, "Minorities and Allied Health," a Report Prepared for the Bureau of Health Resources Development of the Department of Health, Education and Welfare, Under Contract No. 1-AH-34087 (November 30, 1973).

In the second part of the report, "An Analysis of Allied Health Student Enrollment and Allied Workers in the Six Southwestern States", the results of a quantitative analysis of the occupational and educational participation of Indian, Black and Spanish-Americans of the Southwest in the allied health field were tabulated. The methodology consisted of a document analysis of existing information from Arizona, California, Colorado, New Mexico, Oklahoma, and Texas. Various agencies engaged in health manpower planning, health education, and employment were identified. These included Regional Medical Programs, State Offices of Comprehensive Planning, Health Career Associations, and State Employment and Education offices.

The procedures used and the problems encountered in developing the report are explained in the footnotes to the tables and in a conclusion statement which cites several recommendations regarding the collection and analysis of health manpower data.

PHASE II

The basic design of the study methodology for source data documentation which had three components was presented in the contractor's proposal submitted to the Bureau of Health Manpower Education.⁸

⁸Southwest Program Development Corporation, "A Study of Minority Group Barriers to Allied Health Careers in the Southwest," A Proposal Prepared in Response to RFP No. 1-AH-34087(P), Submitted to the Department of Health, Education and Welfare, Bureau of Health Manpower Education (May 1973).

The three components of the study methodology included (1) a fixed response survey questionnaire to be answered by minority students in allied health studies to generate data for statistical analysis, (2) interviews with selected students and program staff to explore experiences, attitudes, insights and values regarding barriers not afforded by other exploratory techniques, and (3) six one-day conferences convening students, dropouts, non-students, staff, parents and employers to examine a prepared initial report, correct any errors or misrepresentations and make recommendations for the final report.

A profile of allied health programs in the southwest was constructed, and a questionnaire survey and data retrieval system was designed in coordination with the other regional contractors.

PHASE III

Phase III involved the implementation of the methodologies developed in Phase II; however, approval for implementing the survey questionnaire was not secured from the Office of Management and Budget, which necessitated a modification of the study methodology, and a new Phase III was designed and implemented.

In lieu of the questionnaire survey and attendant methodologies, contract modification No.4 stipulated that the contractor implement a series of approximately seven

conferences representative of the geographic contract area for further identification and illumination of barriers to (1) making application to post-secondary allied health professional education programs; (2) actual matriculation; and (3) ~~successful program completion~~ by those who matriculate. Also, that the determination of barriers include the ranking, by priority, of barriers according to their importance to each minority group.

The contractor utilized a data printout completed on January 28, 1975, and provided by the American Society of Allied Health Professions⁹ to determine which institutions to contact for convening the conferences. Institutions were selected which offered programs in at least four (4) allied health occupations, and which could draw participants from at least one other institution offering allied health programs.

The director or a staff member of the allied health division was first contacted at each institution to elicit tentative commitment to hosting the conferences, and to designating a coordinator for convening the conferences.

⁹American Society of Allied Health Professions, "Region III, Tables 1 and 2, Minority Enrollments in ERAH Educational Programs," From a Report Prepared by the Equal Representation in Allied Health Committee (Washington, D. C.: 1974 Survey).

TABLE 1

AREA CONFERENCES CONVENED
BY HOST INSTITUTIONS
AND DATES

AREA CONFERENCE NO.	HOST INSTITUTION	CONFERENCE DATE(S)
I	El Centro College, Dallas, Texas	May 2, 1975
II	University of Colorado Medical Center, Denver, Colorado	May 20 & 21, 1975
III	University of New Mexico, Albuquerque, New Mexico	June 2, 1975
IV	University of Oklahoma, Health Science Center Oklahoma City, Oklahoma	June 10 & 11, 1975
V	San Diego State University, San Diego, California	June 18, 1975
VI	Pima Community College Tucson, Arizona	June 26 & 27, 1975
VII	St. Philip's College San Antonio, Texas	June 30, 1975

In three institutions, the task of coordinating the conference was assigned to allied health program staff whereas in three other institutions the minority student affairs office staff coordinated the conferences and in one institution the principal organizer was the director of bi-lingual programs in consultation with the district director of allied health programs.

In the initial telephone contact with each coordinator at the host institutions, a brief presentation of the purpose of the conference and the proposed participant mix was fully explained and explored. An information package was then mailed out. The information package (see Appendix B) contained a cover letter citing the possible conference date discussed in the telephone conversation, a two-page narrative on the purpose of the conference and participant mix, a sample letter to be forwarded by the contractor to conference participants and two forms for submitting ten (10) names for each of the conferences.

The coordinators were responsible for identifying minority students in allied health programs, faculty and administrators in allied health divisions and other staff impacting minority student recruitment. Conference dates were changed, in some instances, in order to facilitate attendance. Participant names were submitted to the contractor, on the forms provided in the information

package, once attendance commitments had been secured by the coordinator.

The contractor forwarded a letter (see Appendix B, p. 152-3) to each participant for receipt the week before the scheduled conference date. In the letters mailed to conference participants the purpose of the conference was explained briefly and in general terms so as not to bias, prejudice or predetermine the conference input. The contractor reasoned that citing the findings on barrier categories in a detailed report or providing a summary of barriers discussed in pertinent literature would, in effect, invalidate the intent of identifying barriers peculiar to a region or of elucidating the extent and impact of barriers throughout the contractor's geographic area. An agenda was also mailed to each participant. (see Appendix C, p. 154).

Each conference included participants who were faculty, minority students, administrators and staff (minority-oriented counselors, coordinators, and others responsible for minority affairs). In addition the conferences included, where practical, other individuals who could contribute to conference purposes, such as high school counselors, vocational guidance counselors, unsuccessful minority applicants to allied health programs

and representatives of minority organizations who relate to educating minority students.

The conference sites were selected on the recommendations of the coordinators as being easily accessible by all conference participants. In all but one instance, conferences were held in a hotel meeting room and dinner was served immediately after the conference in adjacent rooms or private dining areas. The last conference was held on-campus and the dinner was served in the faculty lounge. Transportation did not seem to pose any difficulties for conference participants.

The conferences were conducted by a three-member team of professionals skilled in conducting group discussions. Each conference session was limited to no more than three hours of discussion. The team members were assigned specific roles and functions in conducting the conferences; namely facilitator and responsible for directing the discussion to those areas enumerated in the contract, assistant facilitator and responsible for assisting in directing the discussion, and recorder and responsible for recording the discussion points introduced and the comments made, and summarizing discussion periods as requested.

A pre-printed form (see Appendix E, p.157) was provided for conference participants to register. A brief orientation presented by the facilitator preceded the

discussions. The orientation consisted of brief explanation of the initiation of the study, the contracting office, the contractor's role, the purpose and scope of the study, and the work accomplished in the other phases of this investigation. The purpose and scope of the discussion session as well as a definition of the term "barriers" was clearly stated. The objective of arriving at a priority ranking of barriers by topic area was also stated.

During the orientation, emphasis was placed on the importance of the findings of these sessions and the major role that the participants play; assurance of anonymity with regard to statements made; and mention of the fact that a follow-up national conference would be held to which participants might be invited to attend.¹⁰ The discussion leader then introduced discussion team members and defined their role in conducting the conference. Participants were asked to introduce themselves (omitting their surname if they so preferred), which institution or organization they represented and their position or student status. This brief introduction period was included as a technique for establishing better lines of communication among conference participants.

¹⁰ A release form (see Appendix F, p.) was provided for participants to give permission to the contractor to submit their names to the Bureau of Health Resources Development.

Obstacles/barriers that were suggested by the participants were ranked higher than those that may have been suggested for consideration by the contractor.

Priority rankings by topic areas and the major barriers under each topic area were determined by group consensus. Objections by individuals participants to the rankings which developed were fully examined and changes or additions made as required.

Conference participants were asked to rank barriers by topic area¹¹ using the Roman numerals I through III, with "I" indicating those barriers of the gravest concern, and "II" and "III" indicating a descending order of concern. Initially, participants were reluctant to so rank problems for fear of possibly de-emphasizing a matter that should receive attention. The contractor explained that the rankings were a necessary indication of a group of barriers that should be addressed to insure parity for minorities, and that the values assigned to a grouping of barriers by topic area in no way implied that a second and third ranking signified relative unimportance to the first ranked item(s).

¹¹See Above, p. 5.

CHAPTER III. AREA CONFERENCES

PARTICIPANT RESPONSE RATE

Each conference session was planned to include at least eight (8) participants to meet the goal of at least fifteen (15) participants for each regional conference and one hundred and five (105) participants from the contractor's geographic contract area.

A total of one hundred and eighty-three (183) participants from throughout the geographic contract area were projected to attend the discussion sessions. One hundred and thirty-three (133) participants actually attended the area conferences. (The contractor achieved a seventy-three percent (73%) attendance rate.)

CONFERENCE STUDY POPULATION

The study population for the seven conferences consisted of two distinct groups. One conference study population was composed of allied health program faculty, allied health program staff and administrators, faculty from the various science departments providing science and mathematics remedial courses, minority affairs office staff, counseling and supportive services staff, high school counselors, members of community organizations

implementing health care manpower programs, and nursing program instructors.

The other conference study population consisted of minority students currently enrolled in an allied health program, graduates of an allied health program, minority students who either left an allied health program or had been terminated from an allied health program before completion, minority high school students in summer "pre-professional courses" whose goal was an allied health profession, and minority nursing students.

Nursing program instructors were included at the request of the coordinators. In some instances, nursing programs are considered an integral part of the allied health division and have been available for a longer period of time than allied health courses, yet minority student enrollment is still negligible and concentrated in the licensed practical nurse levels. The nursing program staff and students attending the conferences confirmed allied health participant perceptions of the extent of the barriers faced by minority students in gaining admission to health profession training programs.

Also included as conference participants were nine (9) Asian-Americans; four (4) in the faculty session and five (5) in the student sessions. Although the contract does not include this ethnic minority in the study population, conference coordinators requested their

attendance as this ethnic minority was represented in the faculty and student body.

PARTICIPANT CHARACTERISTICS

Total Participants

In the faculty sessions sixty-four (64) persons participated and in the student sessions sixty-nine (69) persons attended. The sex and ethnicity of conference participants is presented in Table 2 on page 23.

TABLE 2

TOTAL PARTICIPANT CHARACTERISTICS BY SESSION, SEX AND ETHNICITY

	SESSION PARTICIPANTS				ALL PARTICIPANTS	
	Faculty		Student		Total Percent	
	No.	%	No.	%		
Male	36	56	35	51	71	54%
Female	28	44	34	49	62	46%
Anglo-American	14	22	2	3	16	12%
Black-American	16	25	23	33	39	29%
Spanish-American	25	39	37	54	62	47%
Indian-American	5	8	2	3	7	5%
Asian-American	4	6	5	7	9	7%

As noted above, nine (9) of the total participants were Asian-American. Table 3 identifies the ethnic sub-groups

represented by sex and area conference.

TABLE 3

ASIAN-AMERICAN CONFERENCE PARTICIPATION
BY CONFERENCE, SESSION, SEX,
AND ETHNIC SUB-GROUP

Conference	Session		Sex		Sub-Group
	Faculty	Student	Male	Female	
Dallas	X		X		Filipino
Denver	X		X		Japanese
San Diego	X			XX	Japanese
		X	X		Samoan (Am. Samoa)
		X	X	X	Filipino
		X	X		Guamamian
		X		X	Chinese

These participants reiterated the concerns of the minority participants at the sessions and described the barriers affecting their ethnic sub-group as not being dissimilar.

Allied Health Participants

A total of sixty-two (62), or forty-seven percent (47%), of conference participants were allied health professionals and allied health program students and ex-students

The sex and ethnicity of the category of conference participants is presented in Table 4 on page 25.

TABLE 4

**ALLIED HEALTH PARTICIPANT CHARACTERISTICS
BY SESSION, SEX AND ETHNICITY**

	Sessions			
	Faculty		Student	
	No.	#	No.	#
Male	6	40	25	53
Female	9	60	22	47
	<u>15</u>		<u>47</u>	
Anglo-American	7	47	2	4
Black-American	2	13	13	28
Spanish-American	5	33	28	60
Indian-American	1	7	2	4
Asian-American	0	0	2	4
	<u>15</u>		<u>47</u>	

In the faculty sessions, the allied health professions represented are listed on Table 5 below by position held, sex and ethnicity.

TABLE 5

**MINORITY ALLIED HEALTH PROFESSIONALS
BY POSITION HELD, SEX AND ETHNICITY**

POSITION	ALLIED HEALTH PROGRAM/DIVISION	SEX	ETHNICITY
Instructor	Radiological Technology	Male	Spanish-American
	Radiological Technology	Male	Indian-American

TABLE 5 -- Continued

POSITION	ALLIED HEALTH PROGRAM/DIVISION	SEX	ETHNICITY
Recruiter	Respiratory Therapy	Male	Black-American
	Respiratory Therapy	Male	Spanish-American
Chairperson	Radiological Technology	Female	Black-American
Director	Medical Records	Female	Spanish-American
	Medical Records	Female	Spanish-American
	Allied Health Division ¹²	Female	Spanish-American

In the student/ex-student sessions the following allied health programs were represented:

Currently Enrolled Students

Dental Assistant
 Medical Laboratory Technician
 Medical Records
 Medical Technology
 Radiological Technology
 Respiratory Therapy

Graduates

Bio-Medical Technology
 Medical Laboratory Technician
 Medical Technology
 Radiological Technology

Ex-students

Dental Hygiene
 Respiratory Therapy

The respiratory therapy ex-student had transferred to a vocational nursing course, and the dental hygiene

¹²Respiratory Therapy Professional.

ex-student was unsuccessful in gaining re-admission and recently transferred to a physical therapy program. Table 6 graphically illustrates the distribution of minority student and ex-student participants by allied health program:

TABLE 6

ALLIED HEALTH MINORITY STUDENT AND EX-STUDENT PARTICIPANTS BY PROGRAMS, SEX AND ETHNICITY

Allied Health Program	Black		Spanish		Indian		Asian		Total
	M	F	M	F	M	F	M	F	
Bio-Medical Technology								1	1
Dental Assistant		2	1						3
Dental Hygiene				1					1
Medical Laboratory Technician	2	2	8	2					14
Medical Records				1	1	1			3
Medical Technology		1	1	2				1	5
Radiological Technology	3	2	9	3					17
Respiratory Therapy		1							1

Other Participants

The sex and ethnicity of representatives who were minority-oriented counselors, coordinators, and others responsible for minority affairs in the faculty sessions is depicted in Table 7 on the following page.

TABLE 7

FACULTY CONFERENCES PARTICIPANTS NOT
ALLIED HEALTH PROFESSIONALS BY
TITLE, SEX AND ETHNICITY

Title	Anglo		Black		Spanish		Indian		Asian	
	M	F	M	F	M	F	M	F	M	F
College Administrators	3	1								
Professors, Support Courses					3		1			
Recruiters, Medical School & Pharmacy				1	2					
College Counselors	1			1	3				1	
Minority Student Affairs			2	1	3			1	1	
Health Care Program				2	1	2		1		
Health Manpower Program	1		2	1	4					1
High School Counselors		1								1
Nursing Instructors				1		1				
Other				3	1			1		

The status and academic concentration by sex and ethnicity of conference participants not previously tabulated on p. 25 is given in Table 8 on the following page.

TABLE 8

**STUDENT CONFERENCES PARTICIPANTS NOT
ALLIED HEALTH PROGRAM ENROLLEES
BY TITLE, SEX AND ETHNICITY**

Title	Black		Spanish		Asian	
	M	F	M	F	M	F
Student, Biology Major					1	
Youth Representative, Health Care Program					1	
Nursing Program, R.N.		5				
Licensed Vocational Nursing			1			1
Other	1	4	5	3		

AREA CONFERENCE SUMMARIES

A visual representation of the geographic contract area and regional conference sites is included in the Appendices (see Appendix G, p. 149). The area conferences are identified as follows:

Conference I, Texas (Dallas)

Conference II, Colorado (Denver)

Conference III, New Mexico (Albuquerque)

Conference IV, Oklahoma (Oklahoma City)

Conference V, California (San Diego)

Conference VI, Arizona (Tucson)

Conference VII, Texas (San Antonio)¹³

The summary report for each area conference has been organized in six (6) parts as follows: (1) schedule, (2) background data, (3) participant characteristics, (4) observations, (5) discussion session summary and (6) priority rankings. The sessions are reported in the order in which they occurred.

CONFERENCE SUMMARY REPORT I

DALLAS, TEXAS

Schedule

Faculty, administrators and other staff met from 9:30 to 12:30 A.M. and students and ex-students from 2:30 to 5:30 P.M. on May 2, 1975.

Background Data/Host Institution

El Centro College is the downtown campus of the Dallas County Community College system. El Centro College's Allied Health Division offers six fully accredited one and two-year allied health programs. El Centro is the only institution in Dallas and Tarrant County which offers a course of studies programmed to prepare graduates for certification and/or registry testing in more than one

¹³Preliminary findings in the previous six (6) conferences were matched to input from this conference to correct any misrepresentation in the final analysis of barriers affecting minority students throughout the geographic contract area.

allied health profession. Proprietary schools offer programs only for dental assistants and medical technicians; one hospital conducts training for radiological technicians; and three hospitals offer a one-year vocational nursing program. The following table lists the allied health career programs offered by El Centro College.

TABLE 9

ALLIED HEALTH PROGRAMS BY TYPE OF PROGRAM
AND DEGREE OFFERED BY EL CENTRO
COLLEGE'S ALLIED HEALTH DIVISION

PROGRAM	DEGREE
Dental Assisting Technology	Associate Degree in Applied Arts and Sciences
Medical Assisting Technology	Associate Degree in Applied Sciences
Medical Laboratory Technician	Associate Degree in Applied Arts and Sciences
Medical Transcriptionist	One-year Certificate Program
Radiologic Technology	Associate Degree in Applied Science
Respiratory Therapy Technician	One-year Certificate Program
Respiratory Therapy Technology	Associate Degree in Applied Arts and Sciences

The current minority enrollment in allied health programs by sex and ethnicity at El Centro College is presented in Table 10 on the following page.

TABLE 10

EL CENTRO COLLEGE'S ALLIED HEALTH PROGRAMS
MINORITY ENROLLMENT BY SEX AND ETHNICITY

Allied Health Programs	Female	Male	Anglo	Black	Spanish	Indian	Asian	Total
Dental Assisting Technology	26	0	17	6	2	1	0	26
Medical Assisting Technology	21	0	13	6	2	0	0	26
Medical Laboratory Technology	20	10	26	0	1	0	3	30
Radiologic Technology	21	32	33	12	4	0	4	53
Respiratory Therapy	<u>23</u>	<u>24</u>	<u>40</u>	<u>3</u>	<u>3</u>	<u>0</u>	<u>1</u>	<u>47</u>
Totals	111	66	129	27	12	1	8	177

It was reported that the majority of students are not recent high school graduates. The average age is approximately 27 years. Many students enter a program with prior on-the-job training, employment in a hospital or undergraduate course work.

Faculty, Administrators and Other Staff

Participant Characteristics

All the participants at this session were from El

Centro College. The participant characteristics are tabulated below:

SEX	ETHNICITY
Male - 4	Anglo-American - 2
Female - 3	Black-American - 1
	Spanish-American - 2
	Indian-American - 1
	Asian-American - 1
OCCUPATION	
Allied Health - 4	
Other - 3	

Observations

El Centro College has an open-door policy and developmental studies¹⁴ programs to assist minority students in meeting course prerequisites as well as degree and certification requirements. Staff from the various disciplines and supportive services had not previously met together to discuss the conference topic areas.

The faculty were apparently aware of the needs of minority students in coping with allied health programs. After the discussion they stated that the session had expanded their efforts to assist minority students.

¹⁴Developmental studies are remedial courses.

The chairman of the allied health division initiated the discussion by defining El Centro's position and policy regarding minority students. The other participants corroborated her remarks which are summarized below.

With respect to the open door policy, it was reported that El Centro does admit students with weaker educational backgrounds and attempts to meet their needs; that developmental studies courses (refresher courses) are available but this means that a year or two must be added to the allied health program; and that El Centro sometimes has to "beef up" students' educational preparation and put them in a "holding pattern" while doing so. Minority students in this category are considered high risk for retention in allied health programs.

With respect to efforts to retain students, it was reported that current programs allow for upward and downward mobility; e.g., if a student in Respiratory Technology is failing he can move to another program; that El Centro has two main goals (1) to educate for skills and (2) to educate for certification (approximately 85% become registered); and that El Centro stresses the value of developmental studies and support courses for all future endeavors.

Discussion Summary

The discussion of barriers elicited the following points under each of the three topic areas proposed for the conference.

Application

Minority students normally shy away from any field that requires chemistry, biology and mathematics.

Recruitment of minority students for allied health programs is not a significant problem at El Centro.

Previous negative experience with medical and dental clinic visits, doctor's office visits, etc., is probably why more minority students do not consider an allied health career.

Many students have usually not had previous successes in science courses and seldom have role models in the allied health professions to emulate.

Some students do not know that some programs do not require science courses such as chemistry and biology, therefore, these students do not even consider an allied health program.

Student's perceptions of medical careers for minorities is limited to knowledge of secretarial or clerk positions in hospitals, clinics or doctor's offices.

Minorities often have the misconception that the hiring of minorities is limited in the allied health career fields.

Minorities working as technicians in hospitals often do not enter allied health programs to obtain certification or registry; some reasons advanced are (1) not being financially able, (2) being heads of household (especially females) and not able to drop employment for further training, and (3) perceiving self as unable to cope with the academic environment.

Matriculation

Some Spanish-Americans are opposed to shift work (especially for women) and consider an allied health career unsuitable for males.

High school students are usually not counseled about entering allied health careers and are prompted to enter four year programs (counseled to "shoot for the top").

There is usually a trend for students to attend suburban campuses instead of "downtown" El Centro.

The amount of travel involved and the parking fees at the school and hospitals discourage enrollment at the downtown campus.

With respect to financial aid, faculty and staff were generally unaware of the financial aid programs available, but stated that students probably needed more information about financial aid.

Completion

Minority students have difficulty in meeting course load requirements inasmuch as minority students find chemistry, biology and mathematics very difficult and course and contact hours requirements are excessive and cause fatigue.

All textbooks used in the allied health programs at El Centro are written at graduate course level and participants stated that there are NO textbooks written specifically for allied health programs.

Students are oftentimes not thoroughly evaluated or counseled prior to entering an allied health program and are therefore unsuccessful in completing the course.

Laboratory and contact hours required do not allow for remedial work in support courses.¹⁵

Individualized instruction is not possible due to high student to instructor ratios.

Students who cannot cope with allied health programs simply drop out or have to change academic program.

Additional Barriers Particularly Affecting Indian-Americans¹⁶

Tribes speak different languages and do not normally socialize due to cultural and language differences, thus there is no moral support from other Indian-Americans in a program or at an institution.

Indian-Americans usually attend Federal schools which provide an inferior education.

¹⁵Support courses are those basic science and mathematics courses required for a training program.

¹⁶These statements were made by the Indian-American participant and are listed separately due to the serious nature of the barriers identified.

Indian-Americans do not have freedom of choice regarding career choices as they are generally pressured by the Bureau of Indian Affairs to choose a career and an educational institution without the benefit of career counseling.

Indian-Americans usually have no conception of career functions, higher educational institutions, or of urban environments.

Individuals must shift for themselves in a totally new environment and the Bureau of Indian Affairs (BIA) does not assist them in finding housing, etc., as promised.

Reservation culture and environment is so different from the urban environment that individuals always experience culture shock.

There is no motivation for Indian-Americans to move to an urban environment in order to further one's education, especially since such a move is considered as "stepping over" and the individual is sometimes alienated from his tribe.

The Bureau of Indian Affairs pays less than an adequate stipend and inhibits part-time employment or use of other financial aid sources; for example, if the individual is employed part-time, the BIA reduces his stipend by the amount earned or, if the individual is on a BIA stipend, he may not use his veteran's benefits or apply for other federally funded financial aid programs.

Priority Rankings

I. COMPLETION

A. Heavy Course Load and Schedules

1. Course requirements and number of contact hours constitute a heavy load for students and taxes their endurance.
2. The number of contact hours has been maintained at the same previous level, although academic requirements have been increased for certification and registry.
3. Graduate level textbooks are required, therefore students are overwhelmed and fail out of program (the Division of Allied Health at El Centro has about a 50% attrition rate).

B. Financial Aid

1. Stipends or paid internships are not allowed for contact hour work.
2. Although the scheduling load is heavy, students must secure part-time employment to supplement financial aid in order to stay in the program.
3. The Bureau of Indian Affairs' policy of reducing stipends relative to income earned for part-time employment, discourages Indian-Americans from continuing in an allied health program.

II. APPLICATION

A. Knowledge and Awareness of Allied Health Careers

1. High school graduates do not show an interest in allied health careers due to a lack of role models and little or no exposure to allied health career opportunities while in high school.
2. The term "allied health" is new and the functions in allied health careers are not visible.

B. Family and Culture

1. Parental objection to downtown campus, due to the travel and parking fees involved, keep some students out of allied health programs.
2. Some minority candidates experience parental or spouse objections to shift work, especially for female candidates.
3. Spanish-Americans generally reject the idea of an allied health career for males, since traditionally these careers have been considered occupations for females.

III. MATRICULATION

- A. Most high school students are counseled to enter four year programs and "shoot for the top".
- B. El Centro's enrollment quotas for allied health programs defer enrollment, students often perceive this as rejection and do not continue in an allied health program.
- C. The need for developmental studies courses adds at least one year to allied health programs and causes some students to change academic programs.

Students and Ex-students

Participant Characteristics

All the students were either enrolled in allied health programs or were recent graduates of allied health programs at El Centro College. The participant characteristics are summarized below:

SEX	ETHNICITY
Male - 4	Black-American - 6
Female - 5	Spanish-American - 3
ACADEMIC CONCENTRATION	STATUS
Allied Health - 9	Students - 6
Other - 0	Graduates - 2
	Ex-students - 1

Discussion Summary

The discussion of topic areas elicited the following comments on barriers:

Application

High school counselors do not expose students to allied health career possibilities.

Few students were aware of the recruitment efforts by El Centro College.

El Centro College counselors do not clearly explain course requirements or the different allied health programs available.

Course requirement deficiencies are not always explored with the student.

Some students are told of financial aid programs by instructors whereas counselors do not provide this information.

The waiting period for limited enrollment slots causes anxiety and uncertainty regarding acceptance to the Division of Allied Health.

Courses from suburban campuses do not always transfer to allied health programs due to inadequate counseling regarding which courses meet allied health program requirements at El Centro.

High school preparation does not meet prerequisites, therefore students are assigned to developmental studies courses by the counselor.

Matriculation

The scheduling of courses is predetermined and no flexibility is allowed for student's part-time employment or for picking up courses at another campus.

Developmental studies course requirements are established by the counselor and students do not necessarily understand that these courses extend the time for completing a program.

The waiting time for interviews which precede acceptance is discouraging.

Completion

Many students are dropped from a program due to failure in support courses.

Support courses are very difficult for most students.

Students enroll in wrong courses if not counseled about allied health program requirements.

Students who have enrolled in wrong courses are closed out of a program when enrollment quotas are filled and students often change to another program rather than wait one or one and a half years to re-enter an allied program.

Developmental studies courses are irrelevant to allied health programs.

Course scheduling and course load are overwhelming, especially if student needs to work part-time.

More students could pace themselves if allowed to construct own course scheduling; all agreed that most students would prefer an additional year to allow for more study and comprehension as well as to make a part-time job easier.

Heavy course load and need for part-time work leaves little (if any) time for remedial work or independent research.

Many students fail due to lack of time to study.

Courses taught without apparent relation to allied health program are a waste of time.

Some students feel faculty does not encourage them to continue or even to enter an allied health program.

Priority Rankings

I. APPLICATION

- A. High school students are not provided with counseling regarding allied health careers or allied health programs.
- B. The community at large is unfamiliar with allied health careers, training or financial aid programs.
- C. Students do not always receive counseling regarding the specific requirements for the allied health program they have chosen.

II. COMPLETION

- A. Curriculum requirements are not structured to relate specifically to allied health career functions.

- C. On-going counseling is not available for those courses which a student finds difficult.
- D. Counselors do not discuss every possibility for financial aid.
- E. Parking fees at the school and hospitals are excessive.

III. MATRICULATION

- A. Notification of acceptance into an allied health program is delayed by late interviewing.
- B. Students do not always understand that the developmental studies courses extend the time for completing an allied health program.
- C. Counselors do not always inform students of the different allied health programs available.
- D. There is no flexibility allowed in allied health program course scheduling.

CONFERENCE SUMMARY REPORT II

DENVER, COLORADO

Schedule

Faculty, staff and administrators met from 9:30 A.M. to 12:30 P.M. on May 20, 1975. Students and ex-students met on May 21, 1975, from 9:30 A.M. to 12:30 P.M.

Background Data/Host Institution

The University of Colorado Medical Center is located in the center of Denver, Colorado. The main undergraduate campus for the University of Colorado (C.U.) is located twenty miles away in Boulder, Colorado. There are two other C.U. campuses. One campus is three miles from the medical center campus in Denver and the other campus is sixty miles away in Colorado Spring, Colorado.

The University of Colorado Medical Center has had a history of low minority student completions in allied health programs. For instance, the Medical Technology Program first offered training in 1939 and has had only three Black-Americans and five Spanish-American graduates; the Occupational Therapy Program was offered at the Medical Center from 1950 to 1962 and has graduated only five Black-Americans and one Spanish-American; the Physical Therapy Program was instituted in 1948 but there is no record of the number of minority graduates; and there are no figures breaking out the number of minority graduates between 1969 and the date of the report for the Radiation Therapy Technology Training Program.

In 1966, the Medical Center's concern with the "low number of minorities to graduate from the Medical Center's educational program in the history of the campus"¹⁷ resulted in the establishment of a committee "to identify the problem areas of minority inclusion into the health science programs. . . ."¹⁸ The committee was composed of representatives from central administration, the School of Medicine, the School of Nursing, the School of Dentistry, and the Allied

¹⁷Office of Minority Student Affairs, "Minority Student Affairs Program at the University of Colorado Medical Center", A Report Prepared to Determine the Extent of the Need for Recruitment of Non-Whites into the Medical Center Campus (undated), p. 1.

¹⁸Ibid.

Health Programs. Task forces made recommendations on recruitment, retention and financial aid. In addition, an Office of Minority Student Affairs (OMSA) was established on the recommendation of this committee.¹⁹

In addition to intensifying recruitment on undergraduate campuses, OMSA is working closely with the different schools and allied health programs to analyze admission policies in order to eliminate discriminatory practices. The retention effort is decentralized but efforts are being made to develop uniform academic reinforcement and evaluation programs. Financial aid packages (grant, loan, and work study) are assembled by the financial aid officer/office with the prerequisite that all students applying for financial aid must first secure a loan.

The University of Colorado Medical Center offers the following allied health programs as shown in Table 11 below.

TABLE 11

ALLIED HEALTH PROGRAMS AT THE UNIVERSITY OF
COLORADO MEDICAL CENTER BY LENGTH OF
TRAINING, CLASS SIZE AND
USUAL ENROLLMENT

Program	Length of Training (mos.)	Class Size- Max. Accepted	Usual Enrollment
Medical Technology	12	30	25-30
Occupational Therapy	2-3	40	40

¹⁹Ibid.

TABLE 11 -- Continued

Program	Length of Training(mos.)	Class Size Max. Accepted	Usual Enrollment
Physical Therapy	11 1/2	48	48
Radiation Therapy Technology Training	24	7	5

The University of Colorado Medical Center and other organizations are attempting to expose minority students to allied health professions. For example, the University of Colorado Medical Center provides a preprofessional high school course to expose minority students to health fields at the Medical Center, and a summer work situation for students interested in a health/science career. The success of this program is illustrated by the fact that the national percentage of high school students interested in a health/science program is 12% whereas the percentage of students finishing the preprofessional course and taking health/science subjects is 87%.

The Denver Health Careers, Inc., a non-profit corporation, as well as other small organizations, are devising and implementing programs to attract minority students into allied health careers programs supported by Emergency School Assistance monies (3 hours a day) in allied health fields.

The "Indians into Medicine" program places participants in Public Health Services sites during the school year; a program by the Association of Indian Physicians

gives students a chance to work in an Indian physician's office, and Indian-American children between the ages of 7 and 18 are involved in summer health programs.

Faculty, Administrators and Other Staff

Participant Characteristics

SEX	ETHNICITY
Male - 4	Anglo-American - 2
Female - 2	Black-American - 1
	Spanish-American - 1
OCCUPATION	Indian-American - 1
Allied Health - 1	Asian-American - 1
Other - 5	

Observations

Although C.U. is basically committed to recruiting and retaining minority students, the relatively low number of participants and over representation of one office at this session (the Office of Minority Student Affairs) seems to indicate a discrepancy between policy statements and institutional practices. Nonetheless, the discussion points raised by the participants and the observations regarding the effect of institutional practices on minority student enrollment and completion, are evidence of the objectivity and frankness with which the topic areas were discussed.

Discussion Summary

The discussion barriers elicited the following points under each of the topic areas:

Application

High school students have no concept of how many allied health programs are available to them.

Counselors do not know about, or do not give minority students information on, allied health careers.

Students are not supported in pursuing allied health career fields and need more direction by faculty.

Students are often over awed by program requirements since allied health programs are described as being very difficult.

Students are often arbitrarily channeled into vocational training programs or counseled to become teachers.

The main problem is counseling; counselors need in-service training programs to train them on counseling minorities.

Counselors stereotype minorities, reject them, give wrong advice and direction, and otherwise offer little help, and instances of no counseling at all still exist.

There is a lack of minorities in elementary and secondary school faculties to give guidance and serve as role models.

Certain allied health programs are not available or inaccessible, for instance, the Occupational Therapy Program is seventy miles away.

Admission policies for minority students seem more stringent and seem aimed at keeping minorities from enrolling.

Admission policies are often arbitrarily applied without waivers or exceptions under the guise of competitiveness in determining admissions.

People involved in executing policy "pass the buck" to the few people concerned with existing problems instead of assisting in solving the problems.

Financial aid offices apparently have difficulty in identifying the "need" on which financial aid is based; students feel that actual need is not the primary criteria for making decisions on awarding aid.

The existing system and resources for financial assistance does not meet the existing needs.

In some cases the financial aid system is unrepsonsive.

When academic preparation is poor and there is a lack of remedial courses (developmental studies), or poorly organized supportive services, students are bound to fail.

Counseling of high school students, as well as curriculum content, is oriented towards either college preparation or vocational training without an exploration of alternatives.

Home influence is not supportive; for instance, parents may feel that a health/science career is an "impossible dream" or may support a son's effort and disregard a daughter's aspirations.

The pre-professional program probably attracts minority students already motivated; counselors do not necessarily attempt to involve minority students who have not stated a career choice in the health/science field.

Many counselors seem to feel that minority students may be able to cope with a liberal arts program but not with a program that requires the "hard sciences".

Matriculation

Hospital-based schools have too much control over program content and clinical training.

Programs are usually better when divorced from hospital control, as is the case at C.U. Medical Center.

Inadequate counseling provided for matriculation; i.e., students not made aware of prerequisites or effort involved.

Information on financial aid is lacking and overall dissemination of information is poor.

Institutions actively recruit and tend to admit only minority students with the highest qualifications and reject the applications of minority students with lesser qualifications.

Institutions do not feel compelled to admit more than a limited number of minority students.

Two-year institutions do not necessarily gear up or prepare students for handling additional training at C.U. Medical Center or to pursue higher degree program.

There is a general lack of counseling at two-year institutions to insure that higher education institution prerequisites are met.

Admission policy waivers based on student's demonstrated ability to improve GPA while in high school or undergraduate campuses must be sought on an individual basis by OMSA staff.

Undergraduate level counselor's attitudes regarding allied health careers is generally negative; for instance, allied health careers are suggested as an alternative if the student is not "making it" in medical school.

Completion

Financial strain on students is hard, one staff member took six (6) years to complete his studies because he had to work, others simply fail.

Some financial aid programs do not allow students to work at all.

Supportive services for students are not available or poorly organized if they exist.

Students feel alienated and isolated because they are from minorities, usually there are very few minorities enrolled in each class.

There is a need for more peer counseling programs; that is, helping students and giving encouragement, especially where faculty fail to do so.

There is a need for more and better counseling efforts and more minority counselors that can relate to minority problems.

There is a need for more role models in faculty, staff, and administrative positions.

Subjective evaluations are apparently influenced by stereotyping of minority students; instructors do not recognize individual's ability.

Minority students become discouraged from continuing in the program if the financial aid package is strictly or largely a loan, especially if this must be supplemented by part-time employment.

Employment cuts into study time and often conflicts with scheduled remedial or tutorial programs.

Instructor expectations of minority students (stereotyping as low achievers) affect subjective evaluations and grades given to minorities.

Priority Rankings

I. MATRICULATION

- A. Minority students are generally counseled to enter vocational training programs or to pursue a liberal arts degree.
- B. High school and undergraduate counselors are not knowledgeable about or hold a low opinion of allied health programs as second best to medical professions.
- C. Minority students are rejected for admission based on stringent GPA and test score cut-offs without consideration being given to improved performance throughout high school, demonstrated ability in undergraduate courses, or commitment to serve others in an allied health career.

II. COMPLETION

A. Stereotyping

- 1. Instructor expectations affect student's perception of ability to succeed in "hard sciences".
- 2. Subjective evaluations based on minority student stereotyping directly affects grading and instructor's willingness to provide out-of-class assistance with course material.

B. Financial Aid

- 1. Minority student financial aid packages usually have higher loan to grant ratio than loan packages for dominant society applicants.
- 2. The need to maintain at least part-time employment limits minority students ability to take advantage of remedial or tutorial programs, if available.

III. APPLICATION

A. Counseling

- 1. Minority students are still arbitrarily being channeled into vocational training

programs in high school and sometimes are even discouraged from taking college preparatory courses.

2. Students stating an interest in science, are usually channeled into the medical professions or science fields without being informed of allied health careers.

B. Academic Preparation

1. Students are not exposed to allied health careers early in their schooling therefore their academic preparation in high school or even undergraduate campuses is weak.
2. Many students do not meet prerequisites due to inadequate preparation or absence of counseling in undergraduate school.

Students and Ex-students

Participant Characteristics

SEX		ETHNICITY	
Male	- 2	Black-American	- 6
Female	- 7	Spanish-American	- 3
ACADEMIC CONCENTRATION		STATUS	
Allied Health	- 4	Student	- 1
Other	- 5	Graduates	- 2
		Ex-students	- 1
		Other	- 5 ²⁰

²⁰Included three high school students.

Observations

Students and ex-students seemed to have a good grasp of the overall complex of barriers for minority students. Although the participants included two who had graduated from high school about ten years earlier than the rest of the participants, it seemed that any changes that might have occurred in the previous decade were minimal or have had a minimal impact, at least regarding minority student exposure to and involvement in allied health careers.

Discussion Summary

The following comments gained general concurrence as being applicable to the three topic areas explored.

Application

Very few high school students receive exposure to allied health programs or careers, although some do; as exemplified by the three high school minority students attending the conference who were in the C.U. Medical Center's preprofessional course.

A lack of counseling and role models exists.

High school counselor selection of courses and future programs for minority students is often biased.

The counseling process is very discouraging; instead of encouragement, counselors remark to students that, "you don't want to do that, that's not for you, you won't make it, etc."

Minority student lack of preparation in the skills of test taking and post-secondary education "survival skills" are a handicap.

Secondary school course requirements are often of little

use for pursuing post-secondary education.

There are not enough counselors in junior high and high school, therefore counselors are overloaded and sometimes uninformed and there are hardly any minorities in the counseling field.

Lack of information on financial aid, coupled with lack of financial resources, discourage minority students from considering health/science field.

Matriculation

Students need letters of recommendation (three in most cases), and these letters of recommendation weigh heavily in being considered for admission.

Minority students generally do not have access to prestigious professionals for letters of recommendation (students felt letters were not only a difficult entrance barrier but worthless in terms of evaluating what the students can actually do).

Admission interviews are often biased; statements such as the following are made by interviewers: "the only reason we are accepting you is because you are a minority, you probably won't make it, you are underprivileged, etc.". Students perceive interviews as backlash phenomena and feel that although admitted, they are not accepted or acceptable.

Secondary school preparation is undermined or negated by indifference on teachers' and counselors' part.

Minority students lack information on which schools provide what supportive services and financial aid packages beneficial to minorities.

Students lack direction in applying for financial aid and know that financial aid is "packaged" but do not have information on "package" content.

Not enough information on financial aid is given out at any level.

Grades affect selection of who gets aid, and what type of aid is awarded whereas selection is supposedly based on "need".

There is no uniform system of determining "need" and decisions on awarding financial aid are left up to aid officer and in some cases clerical staff.

Different groups receive different amounts of financial aid and some recipients are not even minorities; i.e., white recipient with Spanish surname.

Students are not informed about the best times to apply for aid; timing is important as larger grant-to-loan ratios are awarded to earliest applicants for aid.

Financial aid information and application forms are distributed in some high schools, but there is no follow-up to see if the student understands how to fill out forms and when to submit them; students often give up if the forms are lengthy and difficult to understand.

Students pay for application fees since they are not informed of low income waiver for application fees.

Pre-admission testing is a barrier if students are not test-oriented; tests scores are used by institutions to weed out minorities.

Matriculation "quotas" are established so institutions can insure "control" over student body.

Different tools are used to insure that minority student numbers are kept down; i.e., stringent admission policies, inadequate counseling, grade averages, derogatory remarks and insults, counseled so that required courses are not undertaken, and disparaged for utilizing supportive services.

Larger loan-to-grant ratios are found in financial aid packages developed for minority students.

Completion

Supportive services programs for minorities are poorly designed and contribute to failure.

Course testing is used to weed out minorities and tests are not even relevant in some instances.

SPECIAL NOTE: Students felt strongly that inability to pass written examinations was not a valid indicator in itself of performance ability. Also, that the student's commitment to help save lives was overlooked; however, instructors have told students that they might be suspended from a program for low academic standing because "lives were at stake". Conference participants stressed that a student who was good at test-taking could nonetheless be irresponsible towards his duty to save lives and lackadaisical in overall job performance.

Students are often discouraged by faculty who make comments such as, "you probably won't graduate, you made the wrong choice, you are too fat, and you have an unscientific mind" indicating a lack of acceptance.

There is a general lack of counseling programs to help minorities overcome problems.

Minorities are discriminated against because of skin color and are all lumped together regardless of ability (stereotyped).

Minority students are not informed of class or program progress until too late to change status.

In hospital-based programs, minorities are dropped from courses arbitrarily by other than administrators.

The policy of assigning "points" for attendance without announcing procedure to class affects completion, especially since student is unaware of what constitutes an unexcused absence.

Lack of preparation of students for test taking, such as having courses in note taking, speed reading, different skills required for different tests (multiple choice, essay, etc.), and writing research papers is detrimental to successful completion.

Affirmative action programs are not affirmative, but are used as "backlash" tool against minorities; i.e., minorities are reluctantly admitted into a school or program, minorities receive constant criticism, and minority student errors and mistakes are noted or singled out before the entire class.

Minorities are aware of subtle and outright discrimination by instructors and deans.

The prevailing attitude of instructors and deans seem to be that "we have to let you in but we don't have to graduate you" and that "if you do good work you must have cheated."

If not biased against minorities, faculty is condescending which in many cases is worse.

Faculty with non-professional attitudes who disregard students' effort, commitment, and desire to succeed in grading minority work is extremely discouraging (students all agreed that if there was a single thing they needed it was ENCOURAGEMENT).

Attitude towards supportive services by minorities often overlooked; e.g., needing help is a sign of weakness and minorities who shift for themselves in a ghetto or barrio environment are often reluctant to demonstrate weakness by seeking assistance.

Supportive services programs should be administered by minority staff who relate to minority students and can use the right approaches to overcome reluctance to utilize supportive services.

Workload and outside pressures (peer group, home, community, etc.) plus studies is overwhelming.

Students are forced to use survival skills (cheating, copying,) which is indicative of overly structured programs that are not really teaching anything.

Attrition rate is high for minorities (roughly 50%), most never return to finish program or to attempt post-secondary courses.

Institutions claim that standards are lowered for minorities when in reality they are not and graduation from programs is made tougher.

The mechanisms for handling student problems and complaints are inadequate; faculty and staff "pass the buck", minority affairs offices are overloaded and are not given sufficient student advocacy powers, and students are denied right of self or proper representation when decisions are being made by committees regarding continuation in a program.

Training institutions need to make commitments to student completion of programs instead of trying to get rid of students.

Priority Rankings

I. COMPLETION

A. Cultural Bias

1. The stereotype that some minority students are less than capable in health/science courses or that some minorities should excel in only certain programs affects counseling, grading, evaluation and decisions to retain or dismiss minority students.

2. Minority students perceive testing, grading and evaluation practices as being structured to weed minorities out of programs.

B. Course Content and Load

1. Lack of academic preparation in secondary schools, due to being channeled into other than college preparatory courses, makes health/science courses especially difficult for minorities.
2. The need for maintaining at least part-time employment prevents minorities from taking advantage of remedial work and tutoring sessions, if available.
3. Students are failed on the basis of subjective evaluations by biased instructors.

II. MATRICULATION

- A. Minority students are not counseled early in secondary school regarding course prerequisites for allied health programs.
- B. Admission requirements may be publicized but the weight assigned to each is not explained, or else the policy regarding required submissions is diametrically opposed to evaluations.
- C. Interview sessions seem structured to discourage minorities from considering matriculation.

III. APPLICATION

- A. Minority students are not made aware of financial aid sources and are not counseled or assisted in applying for financial aid.
- B. Minority students are not knowledgeable about application processes nor the weight assigned to each component of the application package.
- C. At the secondary school level, information regarding schools and colleges offering supportive services and financial aid for minorities is not generally disseminated; some counselors establish a GPA cutoff level to determine which students will receive "college counseling" thus excluding a large number of minorities from such counseling.

CONFERENCE SUMMARY REPORT III

ALBUQUERQUE, NEW MEXICO

Schedule

Students and ex-students met from 9:30 A.M. to 12:30 P.M. and faculty, staff and administrators met from 2:30 P.M. to 5:30 P.M.

Background Data/Host Institution

New Mexico boasts of several trends toward attracting minority members into the health/science fields. For instance, secondary school level programs exposing students to science courses and medical fields, a very active and visible chapter of the National Chicano Health Organization, the Basic Science Enrichment Program known nationally for successfully channeling minority students into medical schools (12 medical schools throughout the nation participate in accepting "high risk" students), a program to place medical students in rural health clinics serving the dual purpose of exposing students to the exigencies of providing health care independent of an established medical health center and serving as minority role models and recruiters for health careers.

In spite of these recent and laudable efforts, minority enrollments are not representative of the population mix nor has there been any concerted effort, generally

speaking, by institutions to insure retention of minorities in allied health programs. The number of minorities in the programs merely speaks to the fact that some individuals are determined to achieve goals normally not ascribed to minority members.

Of utmost concern to participants is the state of health care services delivery in New Mexico, especially for rural residents. Rural residents simply learn to do without health care. Minority health care personnel could be the best vehicle for providing the needed health care in a manner sensitive to the cultural uniqueness of the predominantly minority rural populations. However, of the few minorities entering and completing health/science programs, still fewer choose to stay in New Mexico or to serve in the rural areas (perhaps because medical school training "de-communitizes" all students and salary scales are very low in New Mexico).

Students and Ex-students

Participant Characteristics

SEX	ETHNICITY
Male - 2	Black-American - 1
Female - 3	Spanish-American - 2
	Indian-American - 2
ACADEMIC CONCENTRATION	STATUS
Allied Health - 5	Students - 5
Other - 0	Ex-students - 0

Observations

Participants represented the minority population and included students in allied health as a second career as well as students continuing their education in allied health for upward mobility. Students spoke to the topic areas from a variety of perspectives; namely, based on the barriers experienced not only due to ethnicity but also economic status, length of time since graduation from high school, knowledge of allied health as determining career choice, knowledge of financial assistance sources and the processes involved in securing financial assistance. In addition, educational backgrounds differed somewhat insofar as students were products of an urban or rural school system.

Discussion Summary

The discussion of the topic areas elicited the following comments.

Application

Educational inequality exists due to the fact that minority students usually attend either rural schools or urban schools inferior to those generally attended by dominant society children.

Minority students cannot compete with dominant society individuals in seeking admission because minority students have not been counseled to take college preparatory courses in high school.

Low ACT scores achieved by minority students attest to inadequate and unequal educational opportunities; that is, 79% of Black-American applicants and 48% of Spanish-American applicants realize a composite score of less than 15.

Minority student's parents usually have little formal schooling and do not provide support or incentive to consider post-secondary education.

Lack of support or advice from parents places student at a disadvantage in counseling session as students do not know what to ask counselors.

Counselors, if available, do not provide counseling on college preparatory requirements and usually route minority students into vocational/technical courses.

There is a need for minority counselors to provide counseling that addresses minority student needs and problems.

Incentive is often lost at the elementary school level due to low self-concepts held by minority students as a result of teachers' negative attitudes towards minorities.

High school students need role models to provide motivation to consider post-secondary education.

Orientation to post-secondary education should start early at the elementary school level.

Matriculation

Minority students are not made aware of programs designed to upgrade educational preparation for post-secondary education.

Minority students are not made aware of the system of grade point averages and the effect GPA has on being considered for admission to post-secondary institutions or training programs.

Minority students are not counseled or assisted in handling the application process; some minority students are initially discouraged by being sent from office to office (this was classified as the "secretarial block").

Lack of information on financial aid sources keep minorities from considering matriculating for post-secondary education.

Low ACT scores keep minority students out even though ACT scores do not directly relate to student's abilities; that is, tests merely measure sophistication in test taking and most entrance tests (aptitude and intelligence) are culturally biased to favor dominant society members.

Affirmative action programs do not facilitate minority student admissions since institutions consider admitting minority students with highest qualifications as conforming to the letter of the law, whereas no efforts are made to give the less qualified students a chance to prove themselves.

Minority students cannot compete for admission with dominant society members strictly on GPA and ACT scores. Progressive improvement in secondary school and undergraduate courses, as well as motivation, should be given due consideration.

Recruiting efforts are insufficient and where they exist, are poorly implemented (student initiated recruiting efforts, without pay, have been more successful).

Completion

Minority students need exposure to different fields, or workstudy placements in field of interest, to stimulate aspirations for post-secondary education..

Institutions do not provide the range of supportive services needed to insure retention of minority students.

Minority students often struggle along and sometimes fail due to reticence in making difficulties known to the instructor and/or perception that instructor is not willing to assist minorities.

Tutorial programs are not publicized, or students may be unable to utilize this service due to part-time or full-time employment.

Minority students do not generally insist on assistance. Once a student experiences rejection from an instructor or tutor, no additional efforts are made to resolve this barrier and in fact may rather seek help from other minority member classmates.

Minority students often lack study skills and test-taking skills and may fail first semester courses but, if allowed to continue, acquire the skills and demonstrate progress.

The initial source of financial aid may not be enough to maintain the student in an institution. Often students cannot complete the program unless other financial assistance is secured or made known by the institution's financial aid office.

Work and study load is excessive (one student was putting in 90 hours a week between 2 jobs and schooling).

Testing and interviews are not always objective and do not accurately measure student commitment or ability.

Priority Rankings

I. APPLICATION

- A. Minority students cannot compete with dominant society students due to educational inequalities; i.e., the quality of education opportunities are not the same in rural school systems and in urban schools with predominantly minority student populations.
- B. Teacher attitude (racist) and parental lack of knowledge of post-secondary educational opportunities stifle any motivation to consider post-secondary education.
- C. Lack of knowledge of financial aid sources and opportunities keep minority students from considering post-secondary education.

II. COMPLETION

- A. Minority students are not counseled on how to best reach program goals.
- B. Minority students are not assertive in seeking assistance with course difficulties from instructors or tutorial programs.
- C. Financial need coupled with lack of knowledge of and assistance in securing financial aid discourage students from continuing in course of study.

III. MATRICULATION

- A. Minority students are not counseled in the application process or assisted in accomplishing the application process.
- B. Financial need is a prime factor in keeping minority students from attempting matriculation.
- C. Minority students are not exposed to role models;

there are no incentives to consider matriculating in post-secondary educational institutions or allied health programs.

Faculty, Administrators and Other Staff

Participant Characteristics

SEX		ETHNICITY	
Male	- 7	Anglo-American	- 1
Female	- 3	Spanish-American	- 9
OCCUPATION			
Allied Health		- 3	
Other		- 7	

Observations

The fact that racism was the root cause of all the barriers experienced by minorities in seeking post-secondary education was strongly emphasized by conference participants. The statements made regarding barriers to minority student completion of health/science programs indicated that the participants were not only knowledgeable and concerned, but were attempting to maximize opportunities for minority students. One vehicle is the development of innovative programs to provide minorities those supportive services necessary to insure retention and completion.

Discussion Summary

The discussion by topic area gave emphasis to the following barriers.

Application

High school counselors channel minority students into vocational/technical courses and usually Anglo-Americans are the only ones in science courses and therefore achieve highest ACT scores.

Counselor caseloads are heavy; therefore, counselors do not have enough time to counsel students.

There are no minority member counselors.

Students seek out counselors; counselors do not seek out students.

Literature and media material is biased since it usually only shows Anglo-Americans in health professions.

Admission and selection committees do not include minority members.

There are very few role models to provide minorities an incentive to consider post-secondary education.

Minimal efforts are made to recruit minorities into post-secondary institutions.

Minority programs are showcases and do not indicate commitment to recruiting and admitting minorities.

Minority students are hampered by a 12-year educational deficiency and changes in the educational process are needed.

Universities have failed in preparing teachers and counselors sensitive to minorities.

Seventy percent (70%) of minority high school graduates "flunk" entrance examinations.

Entrance tests are designed to exclude minorities by being culturally biased.

Dollar-to-student ratios for minorities is less than adequate; therefore, school systems with predominant minority student populations do not provide same quality instruction nor same quality laboratory facilities.

Cultural aspects are not taken into consideration by school systems in setting up curriculum content at elementary and secondary school levels.

The destruction of incentive to remain in the education system or continue into higher education is affected by racist attitudes of educators and counselors (participants stated that a large number of the brightest minority students drop out before completing the intermediate grades because these students see that the system does not work for them).

Minorities have insufficient knowledge of allied health programs and financial aid and post-secondary education seems inaccessible.

Minority students are not educationally well prepared at any level and this fact, coupled with complete lack of empathy on the part of the institutions towards the cultures involved, is a root problem.

The devastating barrier is that the system destroys cultures and is not geared towards working with social beings.

Matriculation

Minority students with less than a 15-point composite score on the ACT are admitted with the condition that they enroll in the Development Academic Program (DAP) which are remedial courses.

Most Indian-American students drop out of the DAP program because they resent being shunted aside into remedial programs.

The open door policy is merely lip service since minorities are told, "you can give it a try," but supportive services are not provided.

Admission criteria is based almost entirely on GPA.

Allied health programs limit enrollment levels and minorities are easily excluded by GPA and ACT score.

Enrollment levels are determined by limited clinical facilities available to provide clinical contact hours required by allied health programs.

Admission committees composed of staff and faculty who are originally from out of state are unsympathetic towards minorities.

Minorities receive less financial aid; counselors provide information and assistance in applying for financial aid primarily to Anglo-Americans.

Minorities are not aware of College Enrichment Program and Summer Science Program.

Institutions are raising admission standards in order to exclude minorities ("very serious and heavy" white backlash).

AMA accreditation of institutions gives them control of curriculums and regulatory processes which often act as barriers to minorities.

New Mexico has a particularly tough problem because of the tri-lingual make-up of its population, and the requirement for fluency in English for higher studies.

In national tests, the compositional make-up does not take into account the vast cultural and regional differences throughout the Southwest.

Tests are geared toward the exceptional student or those who have complete mastery of the spoken and written word, but is an inadequate tool to measure ability or commitment to the allied health services which deal with human lives.

Tests geared toward national standards can never be fair to the different areas of the country which have unique population compositions.

State loans are only made to medical students and of the last graduating class from medical school only seven (7) out of a total of fifty-seven (57) graduates were minority members.

Completion

Instructors do not allow for minority student deficiency of educational preparation (expect minorities to keep up on their own).

Testing is designed to exclude minorities as high grades are emphasized although there is no direct relationship between academic excellence (product of rote memory, test-taking and sophistication) and ability to function in a profession.

The curriculum content established by the American Medical Association Council on Medical Education is not the core problem for minorities as minorities can master courses with tutorial and remedial assistance.

The basic problems are human relations conflicts and subjective evaluations by preceptors who are racists.

Little or no counseling is provided minority students regarding an allied health program; therefore, students don't know what is involved in going through the program.

Minorities lack "survival skills" and are disparaged publicly for taking advantage of minority-oriented supportive services.

No visible minority role models to provide incentive as most minority members that succeed in completing program are interested in leaving for better pay possibilities elsewhere.

Counseling on the total scope of human as well as academic problems to insure retention is not provided.

Tutoring is structured to meet Anglo-American needs; therefore, minorities are not provided remedial assistance at their level of need.

There are not enough minority students enrolled to begin with and this, coupled with the fact that many of those that do make it do not return to serve the people or go out of state for better wages, poses a problem.

Student workload is high and students need assistance and encouragement badly.

Priority Rankings

I. APPLICATION

- A. Minorities are provided unequal and inadequate educational preparation.
- B. Lack of counseling into college preparatory courses or in application requirements and procedures for post-secondary education effectively limit minority enrollment.
- C. The fact that there are no visible minority role models and only biased literature and media material are available are disincentives for minorities to consider post-secondary education as a viable goal.

II. MATRICULATION

- A. Minorities with low grade point averages and ACT scores are rejected by admission committees composed primarily of out-of-state Anglo-Americans.

- B. Minorities are not made aware of enrichment programs that enhance admission possibilities.
- C. Lack of adequate financial assistance deter minorities from seeking admission and actually matriculating.

III. COMPLETION

- A. Subjective testing by preceptors who are prejudiced affects grades achieved and students are made aware of the possibility of being suspended from a program on subjective evaluations, in spite of academic standing.
- B. Supportive services, if available, are not made known to minorities or may be structured to meet Anglo-American needs; therefore, minorities do not always receive needed assistance in tutorial programs.
- C. Standards are being raised and curriculum content made stricter as a result of white backlash.

CONFERENCE SUMMARY REPORT IV

OKLAHOMA CITY, OKLAHOMA

Schedule

The students met from 2:00 P.M. to 5:00 P.M. on June 10th and the faculty, staff and administrators met from 9:30 A.M. to 12:30 P.M. on June 11, 1975.

Background Data/Host Institution

The Health Sciences Center of the University of Oklahoma, located in Oklahoma City, instituted the Division of Public Health Administration under the College of Health in 1973. Allied health baccalaureate programs were first offered in 1969 and currently include

baccalaureate programs in occupational therapy, radiological technology, medical technology and physical therapy, a non-baccalaureate program in inhalation therapy and a recently initiated program in medical library science.

The University of Oklahoma Health Science Center offers a "2+2" or "flip-flop" program; that is, students may accomplish the first two years of undergraduate work prior to matriculating in the center's programs which involve the clinical practice required for registry/certification or may enter clinical training directly, receive certification and then finish the requirements for a baccalaureate degree. Some students elect the latter course in order to obtain employment to help finance the additional two years of education.

Of grave concern to students and faculty is the practice by hospital administrators of employing allied health personnel from two-year and four-year programs at the same salary levels as those with a baccalaureate degree. In addition, Oklahoma does not require registry or certification for employees functioning as allied health personnel in physician's offices and laboratories.

Special note should be made of the fact that in the past five (5) years only one (1) Spanish-American, two (2) Indian-Americans and one (1) Black-American have graduated from allied health programs at the Health Sciences Center.

Students and Ex-students

Participant Characteristics

SEX	ETHNICITY
Male - 2	Spanish-American - 2
Female - 0	
ACADEMIC CONCENTRATION	
Allied Health - 2	

NOTE: Although telephone contacts were attempted from San Antonio, a number of students had moved or were unable to attend. It seems students had not been contacted prior to receiving the letter and agenda forwarded by SPDC on May 27, 1975. Also, the students that had received their letters were not allowed to attend because they were in class or on-call and our contact had not cleared with their director for their release.

Observations

The two students who attended commented on the barriers to minority students from two different perspectives: one student had enrolled in the clinical practice program immediately after graduating from high school and had a solid science background as he had accomplished all the science and math courses offered at the rural high school he attended, whereas the other ..

participant had had a very inadequate high school education but had already served in the military, held gainful employment outside of Oklahoma and completed some undergraduate courses before matriculating in the radiological technology program.

Discussion Summary

The input from these two students was spontaneous, objective and comprehensive. The discussion dealt with the following:

Application

The only exposure to medical professions for minority students is often the daytime television soap operas which portray doctors and nurses almost exclusively.

Minorities perceive medical careers as being unattainable and parents often discourage offspring from entering a medical field.

Elementary and high school counselors do not provide career counseling or college preparatory counseling.

Elementary and high school counselors cannot provide counseling on allied health professions due to ignorance of allied health programs.

Parents are often not supportive of student's desire or intent to undertake post-secondary education for two reasons: lack of finances to assist offspring in attaining post-secondary degree and a desire to protect offspring from experiencing racial discrimination and failure.

Parents are not knowledgeable of allied health professions or the preparation entailed for these professions.

Financial need and the lack of financial aid information prevent minorities from considering post-secondary education or a four-year allied health program.

Role models do not exist for minorities; for instance, in

Oklahoma, only one Spanish-American has finished medical school in the past thirty years and one or two minorities are currently enrolled in some of the allied health programs.

There are no tutoring programs in high schools to assist with science and math courses for those students with a lack of or inadequate elementary school preparation.

Minorities often perceive themselves as being "dumb" and do not take college preparatory courses, therefore do not acquire fundamental tools to pursue post-secondary education.

Matriculation:

Lack of information regarding financial aid programs or how to go about applying for financial aid, reinforces the notion that for minorities a post-secondary education is out of the question.

There are two processes for eliminating minorities from being considered for admission to a post-secondary institution namely, the application form and the required letters of recommendation, and the interview session.

Admissions and interview committees lack minority representatives.

The stress on academic excellence is detrimental to minorities, especially if academic preparation is acquired in rural school systems.

The penchant for gauging "brightness" and "success potential" on an aggressive personality is definitely detrimental to minorities whose culture considers aggressiveness an undesirable personality trait.

Due to financial need, minorities consider securing employment as a more realistic goal and direct route to attaining independence or supplementing the family's income.

Completion

Students seem to have no rights, and no regulations seem to exist, regarding the number of hours students must devote to clinical practice.

The accrediting and registry societies merely recommend clinical practice hours and the number of patient examinations that must be performed, but program administrators often use these recommendations as a base figure for program requirements.

Students must devote a minimum of 64 hours to the program for both lecture and clinical schedules, and are often required to spend in excess of 80 hours per week.

Some institutions do not fill technician slots because students are expected to and do perform the technician tasks.

Schedules are not published with sufficient time to allow students to meet other personal commitments.

No consideration is given to student needs in establishing schedules (for instance, married couples are assigned to separate clinical sites).

Due to the workload and the short notice of work/class schedules, students cannot plan for part-time employment, academic courses, or even vacation time.

Program directors, especially those with hospital-based program experience, are dictatorial in setting up schedules and disallowing absences even if due to illness.

Program directors sometime determine dismissals on other than an academic basis.

The financial aid awarded is mostly loans, especially for Spanish-Americans.

Students are not permitted to review written examinations, therefore cannot change an assigned grade by discussing it with the instructor.

Instructors are generally very competent and textbooks are excellent (designed to introduce course at basic level and progress to more thorough, comprehensive understanding of the subject), but some minorities do not seek out course assistance from the instructor or tutors due to unfamiliarity with "survival skills" and hesitancy to demonstrate weakness or inferiority.

Students at the Health Science Center are actively recruited before completion of training; therefore, do not foresee difficulty in obtaining jobs, but deplore the low salary scales in Oklahoma. Oklahoma loses too many qualified personnel to other states for this reason.

Courses are geared for "big city medicine"; therefore, need training for small clinic setting and in basic screening procedures (taking temperatures, weighing patients, taking history and filling out other forms, drawing blood and performing routine laboratory procedures, maintaining patient files, etc.).

In order to be scheduled for state boards, candidates must have a letter of recommendation (character reference) from program administrators and this is a critical issue since program administrators penalize students who have "spoken up for their rights."

Priority Rankings

I. APPLICATION

- A. Minorities lack exposure to allied health careers and financial aid sources
- B. Many minorities consider any career requiring hard sciences and lengthy training inaccessible due to conditioning (self perception as incapable of mastering post-secondary courses) and financial need.

II. COMPLETION

- A. A major factor affecting completion is financial need; that is, two-year programs are preferred by minorities to baccalaureate program because it puts the student in the job market sooner.
- B. The workload and arbitrary dictatorial decisions by program administrators discourage minorities.

III. MATRICULATION

- A. Lack of information regarding financial aid sources keep minorities from considering enrollment in allied health programs.
- B. Admission requirements based on grade point averages and subjective evaluations of success potential effectively limit minority enrollment in allied health programs.

Faculty, Administrators and Staff

Participant Characteristics

SEX		ETHNICITY	
Male	- 3	Anglo-American	- 3
Female	- 2	Black-American	- 2
OCCUPATION			
	Allied Health	- 1	
	Other	- 4	

Observations

The participant interchange indicated respect for the efforts being made to involve minorities in allied health programs but described objectively the problems that exist and have existed for decades.

The participants felt that action needs to be taken to establish affirmative action practices that implement affirmative action policy.

Discussion Summary

The following points under each conference topic area gained concurrence among participants.

Application

No mechanism has been formally established to inform students at undergraduate institutions of the courses and programs offered at the Health Science Center.

Junior college districts are not aware of allied health programs although efforts are being made to work out course equivalency between undergraduate institutions and the Health Science Center.

Pre-allied health programs are not generally offered at junior colleges and colleges.

Recruitment is being attempted from among undergraduate students but no "bridge" with high schools has been established. (Interestingly, one participant stated that the Health Science Center cannot recruit in high schools because, "they are not our students.")

Recruitment at the high school level is done informally and only when recruiters are invited to attend career day programs because high school districts are not receptive to Health Science Center recruiters attempting a more direct recruitment effort.

The allied health field is not well known to high school students.

Minorities usually do not consider an allied health career since exposure is generally to doctors, nurses, and dentists and minorities consider an allied health career equivalent to a medical career which is considered inaccessible.

Most high school counselors have only a layman's knowledge of health fields and are not the appropriate personnel to disseminate information on allied health careers.

High school career day programs are normally offered to high school seniors in the spring before graduation but there is a need to disseminate information at lower grades to insure adequate high school preparation.

One students enter a course of studies in junior college, it is not easy to move from an allied health assistant program to an allied health baccalaureate program.

College level counseling is most inadequate so that most students assume a bachelors degree is required for admission to a Health Science Center program and the "2+2" program is still not widely known.

Counselors are leery of directing minority students into allied health programs because they are not aware of minorities successfully completing allied health programs.

Counselors have preconceived ideas regarding minority students' career and occupation potentials.

Parents have a greater influence than counselors in directing a student into college preparatory courses.

Most minorities undertake only the bare minimum of college preparatory courses in high school.

Minority students lack role models, especially in rural areas; Oklahoma is now seeing the first generation of Black-American and Indian-American professionals.

Federal funding of recruitment programs are highly categorical and not coordinated statewide.

Indian-Americans are normally channeled into the High School Institute, an Indian school in Kansas, that is oriented to vocational/technical training.

Students do not receive enough information to make career choices and do not understand what it takes to achieve career goals.

Financial need is a barrier since grants and loans are limited in number and tuition waivers are not widely known nor of any help unless financial assistance is secured.

More students do not consider post-secondary education because they are not "poor enough" to receive financial aid.

Parental support is more readily obtained if student receives remuneration or financial assistance.

In Oklahoma, the problem is still with "teaching health" much less health science courses.

Career counseling must be approached differently; that is, offer work experience first and then follow with counseling on course requirements.

Matriculation

Minority students experience "negativism" from counselors; that is, counselors advise minority students to enter one step below aspiration.

Minority students who do not meet admission requirements are not advised of deficiencies, or notified promptly of rejection.

The prevailing high school counseling philosophy of fostering late career choices; that is, counseling students

into liberal arts program with a career choice deferred until after sophomore year in college is detrimental to early registration into an allied health program or pre-allied health courses.

Minorities need convincing that an honest effort is being made to give consideration to promoting minorities.

Often the best minority students are channeled into vocational/technical courses.

Minority students do not consider taking the basic sciences and mathematic courses in high school or usually aspire to no more than an allied health assistant program. (Nonetheless, the same participant stated that minority students are given greater consideration and assistance than "same quality Anglo-American.")

The registry for respiratory therapy, dental hygiene and radiologic technology is identical for both two and four year programs, and salaries are essentially identical for graduates of both programs.

The attitude that students cannot have a chance to fail in allied health programs, because marginal students lack basic knowledge and endanger patient lives, is one mode of eliminating minorities.

Minorities are rejected/eliminated from consideration by GPA and ACT scores and never get to the last step, namely, the interview.

Minority student entrance examination scores being lower automatically puts them at a disadvantage because cutoff is made early due to limited training slots and the large number of applicants. Only the highly qualified are considered for admission.

The academic institution's response to a high level of interest and larger number of applicants is to raise admission requirements and therefore effectively eliminate minorities.

Completion

Minority students face a greater chance of failing out of allied health programs because other disciplines do not require the same level of difficulty (usually find that in the sciences, scores are either "A" or "B" or "F", there is no middle strength).

Minorities need orientation to "subculture of education", how to use system (tutoring, libraries, student loan programs), and how to adjust to educational milieu.

There is no funding for tutoring in allied health programs and students must rely on faculty to provide assistance on their own time.

There is no mechanism for identifying students who need help early enough to prevent drop outs (minority students are not aggressive in seeking out assistance on their own since this is considered an admittance of inferiority to dominant society classmates).

Faculty, with some exceptions, is not sensitive to individual student needs and allied health programs lose minority students due to this insensitivity.

Subjective evaluations regarding aggressiveness and functioning within a given schedule as being indicators of a professional attitude is detrimental to retention of minority students who evidence less aggressiveness and who are people-oriented instead of schedule oriented.

Priority Rankings.

I. APPLICATION

- A. High school counselors are unaware of allied health careers and programs, and do not channel students into the required preparatory courses.
- B. Recruitment from junior college and undergraduate college campuses is not very successful as students cannot always transfer credits already earned to the Health Science Center programs.

II. MATRICULATION

- A. Minority students are either channeled into two-year assistant programs or do not receive consideration for admission to the Health Science Center programs due to low GPA and ACT scores and the large number of applicants for limited training program slots.
- B. Marginal students are not accepted because institutions strongly believe that these students lack basic knowledge and will endanger patient lives.

- C. Financial need deters minorities from considering a baccalaureate program, especially if financial aid criteria excludes them from receiving assistance because they are "not poor enough."

III. COMPLETION

- A. Faculty, with some exceptions, is not sensitive to individual student needs and lose minority students from allied health programs on this basis.
- B. Tutoring is provided if requested and on the instructor's own time as funding is not available for a tutoring program for allied health programs.

CONFERENCE SUMMARY REPORT V

SAN DIEGO, CALIFORNIA

Schedule

The students met from 9:30 A.M. to 12:30 P.M. and the faculty, staff and administrators met from 2:00 P.M. to 5:00 P.M. on June 18, 1975.

Background Data/Host Institution

San Diego State University is one of the 19 institutions in the state college system in California. Approximately 32,000 students are currently enrolled; of these, 4,000 students are from minority groups (Spanish-American, Black-American, Indian-American and Asian-American sub-groups.) Faculty members number approximately 18,000 with only about 30 minority group faculty members. (Roughly, 12% minority students and only 0.2% minority faculty members.)

The Education Opportunities and Minority Program

(EO/MP) Office assist minorities in completing the application process and in gaining admittance to the college. However, college administrators and faculty consider minority students so admitted less qualified and less able to complete a course of studies. Apparently, the record of satisfactory completion (sixty percent (60%) minority student retention rate) has had little impact in removing the stigma of being an "EOP" student. As late as four and a half years ago, a university study included a statement by the board of regents to the effect that "[we] believe that minorities cannot overcome their background . . ."

In the San Diego area, minority community organizations and clinic personnel have taken a strong role in disseminating information on medical and allied health careers and in counseling and encouraging youth to prepare for these careers. Also, financial aid and support is provided in some instances.

Students and Ex-students

Participant Characteristics

SEX	ETHNICITY
Male - 5	Black-American - 5
Female - 6	Spanish-American - 1
	Asian-American - 5

ACADEMIC CONCENTRATION	STATUS
Allied Health - 3	Students - 6
Other - 8	Graduates - 3
	Ex-students - 2

Observations

Although the participants did not represent a large number of allied health programs/occupations, it must be kept in mind that San Diego State University reports only three (3) minority students in allied health programs.²⁰ The participants nonetheless represented minority students in health science programs and their perceptions are valid and applicable to barriers minority students encounter in entering and completing allied health programs.

Discussion Summary

The participants concurred on the seriousness of the barriers discussed as well as the need to facilitate educational opportunities in health sciences for minorities.

The following points were discussed:

Application

Counselors do not have information on what prerequisites are required for medical fields.

²⁰American Society of Allied Health Professions,
loc. cit.

Minorities are usually routed away from sciences since some counselors maintain that minorities are "not qualified" to undertake the prerequisites for a medical career.

Minorities interested in Medical careers are discouraged by counselors based on grades alone and have remarked "we do not want to send a flunkie on to UCLA, you are a bad risk, etc."

Counselors are very selective of who is encouraged to seek post-secondary education (normally, students with an I.Q. of 125 and over), who is presented to college recruiters, and who is selected as recipient of grants and scholarships.

Most minority students respond to peer pressure (generally to maintain status quo and not aspire to professional training/positions), parents (fear of failure in attempting professional training, and keep family unit intact and geographically concentrated) and counselors (low expectations and vocational/technical orientation).

Minority parents have little or no financial resources to assist with post-secondary education.

Matriculation

The fee waiver option for application fees is not publicized and not generally made known to minority applicants.

Financial aid seems to be earmarked for Spanish-Americans and Black-Americans, and other smaller minorities are not considered as a "minority" and must compete with the general population for financial aid.

Financial need is a great barrier.

There are few installment payment plans for tuition costs; if a veteran, veteran's benefits do not provide enough monies to support a long-term education.

Minority students are discouraged by peers, parents and counselors (secondary school and college level) from matriculating in a four-year program.

The culturally and financially disadvantaged do not get the assistance needed to resolve financial and academic deficiencies.

The "numbers" game in admitting minorities is an additional barrier.

A widespread assumption is that admission requirements have been lowered to accommodate minorities whereas admission requirements are more stringent and quotas are being used to limit minority enrollment.

Although there is no open admission policy, there are no apparent barriers to submitting an application for admission; however, minorities face several barriers in the application process; namely, (1) many minority applicants are required to enroll under the Educational Opportunities Program (EOP) and EOP carries a negative connotation that is, that students are unable to satisfy admission requirements therefore must be unable to cope with the course work (one participant related that she had a GPA of 3.5 and was still required to enroll under the EOP), (2) EOP programs are perceived as "weaker" whereas the only difference is that courses start at a more basic level but still cover the same material as comparable courses on campus or elsewhere, (3) minority applicants are not notified of acceptance until right before registration, often, processing is delayed because applications get "lost" and need to be re-submitted, (4) financial aid officers do not seek out different financial aid sources and normally advise minorities of loan programs only, (5) minority applicants with a declared major are often told that there are too many majors in the department (the nursing program, for instance, has instituted a two-year moratorium in admitting students causing a special impact on minorities), and (6) minority applicants are often questioned as to social status, parents' occupations, attitudes and the like and admission committees communicate hesitancy in admitting applicants based on responses to these questions.

The EOP office is not supported by the institution and such tactics as delaying the evaluation and processing of EOP applications and setting departmental quotas are used to frustrate their efforts.

Completion

Minority students experience constant hassles that are discouraging; for instance, (1) faculty/instructor attitudes and practices regarding EOP and minority students -- stereotyping student's ability level and grade they will achieve and not extending the respect and credibility to minority students as to traditional students (minority students must constantly prove themselves), realigning grading curves to accommodate traditional students in the effect of lowering grades for minorities, giving minorities lower scores for superior work because minorities have

never before scored high or because it is unseemly that a minority score higher than a traditional student; (2) faculty often impresses upon a minority student that a high grade was a freak occurrence and state, "that will be your last A, a Black never made an A before, there won't be that many A's from me, etc.," and (3) minority students who exhibit ability to cope with course content and maintain high scores are told each semester, "I'm surprised you've done so well so far, I hope you can continue in the program because from now on the courses are harder, etc."

Financial need necessitates employment for the majority of minority students and imposes an additional burden to successful completion.

Minority students are not encouraged to remain in a program and are often told, "it's not bad to drop out", and advised to undertake a two-year program instead of continuing in a degree program.

Minority students are not advised of any financial aid other than loans; scholarships and grants are the exception.

Academically, minority students are hampered by the step-lock course design since there is no latitude for continuation in the program if flunking out of one course, or for speedy re-entry into a program.

There is a general lack of supportive services, especially tutoring, and out of class assistance by instructors.

Institutions concerned with research capability often do not consider teaching ability or ability to establish teacher-student rapport in filling instructor positions.

Faculty is not sensitive to minority cultures or cultural difference.

Minority students experience "culture shock" due to the size and impersonal nature of a large institution.

Post-graduate slots are "closing up" for minorities and minorities see no future in a four-year degree if they will be unable to pursue a higher degree.

I. APPLICATION

- A. The quality of education provided minority students does not adequately prepare them for post-secondary

education and the counseling provided often is structured to simply get minorities through high school.

- B. Parental and peer influence is negative with respect to allied health careers due to orientation to employment in vocational occupations and lack of knowledge of minorities in allied health.
- C. Most minority students require financial assistance as well as employment to undertake post-secondary education and are not advised of other than student loan programs.

II. MATRICULATION

- A. Minority students are not made aware of the fee waiver option for application fees or other financial aid sources other than loan programs.
- B. Most minority students channeled through the EOP office, and designated "EOP students" which stereotypes minorities as low-achievers.
- C. Although admission under the auspices of the EOP office carries a negative connotation, minority students know that the application process facilitated by the EOP office efforts helps to counteract the quotas established by departments.

III. COMPLETION

- A. Minority students are not given full credit for work performed as grades are often determined by misconception that minority students are low-achievers.
- B. Minority students are constantly made aware of faculty/instructor anticipation that they will drop out, or told that the next level of work is probably beyond their capabilities.

Faculty, Administrator and Staff

Participant Characteristics

SEX	ETHNICITY
Male - 10	Anglo-American - 1
Female - 12	Black-American - 9
	Spanish-American - 7
OCCUPATION	Indian-American - 3
Allied Health - 0	Asian-American - 2
Other - 22	

Observations

With the exception of one individual, participants represented minority groups. Sixteen (16) participants dealt with the recruitment, teaching and retention of minority students in medical and allied health programs. All were actively involved in enhancing educational opportunities for minority students through individual efforts and professional or student organizations. As minorities, conference participants were not only products of previous "systems" but could analyze current policies and practices as to progress towards equal educational opportunities for minorities. Their perceptions not only reflected concern with the current situation and originality in presenting possible approaches and solutions, but also an acute sensitivity to minority student problems within educational institutions.

Discussion Summary

The following comments gained general concurrence from participants as being relevant concerns.

Application

High school students are not aware of allied health careers or of prerequisites for allied health programs.

There are no minority role models and students are not aware of job possibilities.

There is no recruitment arm for allied health careers as in other trades.

Teachers and counselors do not motivate "borderline" students.

Parents are not involved in efforts to motivate young people or aware of what goes on in high school.

The type of quality of education received is inadequate and a change in the educational system is needed.

Counselors need training and information on advising students regarding allied health careers and on identifying "talent" for the sciences in minority students.

There are not enough counselors for a one-to-one relationship and counselors are not oriented to the cultural uniqueness of minority group students.

Parents are unable to provide impetus and motivation since minority parents' primary concern is "making a living."

For Indian-American youth, contact with parents is limited since schools are far removed from reservation.

In high school, Indian-American youth are shunted into vocational/technical courses.

Parents must be involved in "community process" and provided the information necessary to help youth set realistic goals (that is, aspire to other than jobs traditionally held by minorities in the immediate community).

Counselors tend to take too much choice away from minority students by directing students into programs in which they will have no problems succeeding (counselors seem to think a student's failure reflects on his own ability).

Professional associations set the standards, control who will be counselors, and maintain that minorities cannot overcome handicaps.

Medical and allied health careers are enveloped in mysticism, thus minority students consider these careers unrealistic for minorities.

Matriculation

Peer pressure is very influential in forming career choices and is a critical barrier to minority student's involvement in the sciences and allied health programs.

Financial aid sources, other than student loans are not publicized; therefore, minorities fall into a loan pattern and do not seek scholarships (mounting loans discourage minorities from considering long-range education).

Scholarships are categorical and specialized; education is handled as a privilege when it is a right.

College recruiters often recruit minorities to meet quotas and are not really concerned with the student's ability.

Analyzing minority student qualifications on grades alone is a disservice; admission committees must also take into consideration a student's personal characteristics, personality traits and commitment.

Recruitment of minorities now carries built in failure since federal funds for supportive services are being withdrawn and students are aware that a commitment has been renege.

Allied health manpower training programs are dependent on federal funding and recession has cut down on training programs.

Setting up ethnic studies programs alleviated the pressure on institutions from minority students and these programs draw minority students who assume that a degree in ethnic studies will be of value; whereas, it does not really prepare them for a viable career.

Completion

Allied health programs are high-cost programs and minority student loans are high for a four to six year program. Also veteran's benefits only cover the first two or three years.

Minority students need orientation to survival skills; that is, study discipline, note taking, test taking, tutorial programs, student organization to maximize study effort, etc.

Supportive services are not available or not known, minority students hesitate to use tutorial program not geared to their needs or are unable to utilize them due to other commitments (employment and/or family responsibilities).

Peer group influence (being ostracized due to devoting time to studies instead of social activities) and parental/extended family expectations for assuming responsibilities and roles are other factors that affect completion.

Minority students often need to supplement the family income in addition to financing an education.

The relevancy of curriculum and course structuring to career goals and student needs determines continuation in some instances.

The tenure system at institutions perpetuates the status quo regarding handling of minority students as untenured professors on shaky ground are hampered in instituting innovative programs.

Lack of sensitivity to cultural differences and a negative attitude regarding minority student capabilities on the part of administration and faculty.

Priority Rankings

I. APPLICATION

- A. Poor quality education in elementary and secondary school does not prepare minority students for undertaking courses in the sciences.
- B. Minority students do not aspire to undertake allied health programs due to counselor's negative attitude regarding minority student potential and parental hesitancy to motivate into professional careers.

II. MATRICULATION

- A. Admission committees concentrate on grades as an indicator of success potential in the sciences and allied health courses and do not give due consideration to other factors.

- B. Financial need and lack of information on financial aid sources keep minorities from considering allied health programs.

III. COMPLETION

- A. Financial need and lack of financial resources other than loans discourage minorities from pursuing long-term education programs.
- B. Parental expectations and peer pressures in addition to lack of survival skills hinder minority students from completing allied health programs.

CONFERENCE SUMMARY REPORT VI

TUCSON, ARIZONA

Schedule

The student session was held on June 26, 1975 from 9:30 A.M. to 12:30 P.M. The faculty, staff and administrators' session was held on June 27, 1975 from 2:00 P.M. to 5:00 P.M.

Background Data/Host Institution

Pima Community College has an enrollment on the main campus of approximately 11,000. The following allied health programs are offered: Radiologic Technology, Ophthalmic Technician, Inhalation Therapist, Emergency Medical Technician and Registered Nurse. (Nursing is not considered distinct from other allied health occupations.)

In a recent class of ninety-six (96) there were six (6) Black-Americans and fifteen (15) Spanish-Americans enrolled. Of these, thirty-six (36) graduated, three (3)

of which were Spanish-Americans and one (1) Black-American. The mean age is 26.3 years with a range of from 17 to 51 years of age. The Emergency Medical Technician (EMT) program has a higher minority enrollment. This is a reflection of the high representation of minorities in the fire department. Since 1971, ten (10) Black-Americans and five (5) Spanish-Americans have completed the EMT program. It was noted that the occupation is becoming more professional in its licensure requirements and changes are made in the State Board examinations every six (6) months. The State Board at present, must approve any and all changes in facilities, curriculum and hours.

The public school systems in Tucson do not seem to reflect efforts to eradicate de facto segregation. The largest school district is three fourths minority with poor administration and less money than others with a predominantly white enrollment. There is some career choice emphasis from kindergarten through the twelfth grade by way of a three-year, \$3 million program. Career kits have been installed in the schools for student perusal. It is, however, appraised as ineffective and deemed a political football since there has been negative reaction by conservatives to program expenditures.

Indian-American enrollment in the college is a total of seventy-five (75) Indian-Americans. There are no Indian-Americans enrolled in the Pima College allied

health programs. The faculty of Pima College is approximately fifteen percent (15%) minority, the majority of whom are Spanish-Americans; however, Spanish-Americans are concentrated mostly in business and bi-lingual education programs. Effective July 1, 1975, an Indian-American will become Vice-President of Pima College. The health career role models in the Tucson Community are mostly licensed practical nurses and predominantly Spanish-American. In the entire state there are no Black-American dental technicians and only two (2) Black-American physicians and three (3) Black-American dentists.

The Allied Health Department of Pima College developed and submitted a proposal for a health preparation program to deal with admission policies and the development of qualified minority applicants for allied health programs last year. It was approved but not funded.

Students and Ex-students

Participant Characteristics

SEX		ETHNICITY	
Male	- 4	Black-American	- 2
Female	- 5	Spanish-American	- 7
ACADEMIC CONCENTRATION		STATUS	
Allied Health	- 0	Students	- 6
Other	- 9	Graduates	- 1
		Ex-students	- 0
		Other	- 2

Observations

Fifteen (15) students and ex-students were contacted by mail with sufficient time allowed for indicating whether or not they would be able to attend the conference. There was no indication from the participants that it would be impossible for them to attend. The contractor telephoned the participants as a final check and were able to directly contact only a few students. Five (5) students did not have telephones or the telephone numbers were unknown, one (1) student had just been released from the hospital, one (1) student had gone back to the reservation, three (3) students had moved, one (1) student had a class conflict, and one (1) student was working. The participant list was submitted to the contact person by the allied health division. The contact person and his staff made a concerted effort to contact other students on campus who could break away for the morning.

The input provided by these students dealt with the same concerns that allied health faculty and staff pinpointed. In this respect, the input was deemed valid.

Discussion Summary

The discussion dealt with the following barriers.

Application

High school students are not exposed to allied health careers; the emphasis is on business careers.

Counselors seem to be able to provide only very general information about allied health careers.

Parents motivate offspring to aspire for post-secondary education, but are not knowledgeable of admission requirements or processes therefore cannot counsel offspring regarding high school preparation.

Some high schools do not require such courses as chemistry or algebra for high school diploma.

The quality of high school academic preparation differs in quality among the school districts.

Minorities are not visible in professional positions in allied health as the majority of minorities are employed in the hospital's housekeeping department (often the maids must act as interpreters between patients and doctors).

High schools do not offer courses to prepare students for allied health programs.

Matriculation

Screening tests in reading and mathematics keep minorities from entering allied health programs directly as a 14th grade averages is required.

Many minority students must spend at least one (1) year in remedial courses and then pass screening tests before being considered for admission.

Additional requirements (sometimes different for each applicant) are established for minority applicants.

The waiting list of applicants is not always used in determining admissions to programs.

The number of minorities who flunk state boards seems to affect the number of minorities admitted to allied health programs and the number deemed suitable to graduate from a program.

No active recruitment of minorities for allied health programs is undertaken.

Minority applicants who decide on an allied health career usually have to take remedial courses to meet academic requirements and skills.

The family does not always encourage a minority student to go into allied health programs; however, the family is very supportive once they see that a student is succeeding in the program.

It is easier to go back to school for an allied health career if channeled by federally funded manpower program due to the counseling and financial assistance provided by the manpower program.

Completion

Many minority students must devote three (3) instead of two (2) years to completing a two-year associate degree program in allied health due to required remedial courses. This defeats the purpose of a two-year program since minorities want to get through in two (2) years and become gainfully employed due to financial need.

Financial assistance (other than that provided by federally funded manpower programs) is often available only if the student is in clinical training already.

Some instructors continuously discourage minorities from continuing in allied health programs and indicate that a lower level program is better for minorities. Such remarks as, "because of your background you won't make it through the program" and "you are not RN material" have been made by instructors to minority students.

Instructors and administrators seem to be prejudiced and stereotype minorities; a commonly held opinion is that Black-Americans and Spanish-Americans do not understand what they read.

Minority students have noticed that non-minority students get by without harassment with a C average, whereas minorities regardless of grade average are discouraged from continuing in the program.

Minority students who are aggressive and outspoken are penalized and soon learn that tests must be written in ink to preclude changes in answers.

Help sessions are offered towards the end of the program and often most minorities have already dropped out.

No allowances are made for students who must work in setting up curriculum or clinical schedules.

Some textbooks seem incomplete and the basic texts used are more helpful for students with no prior work experience in an allied health career or health care system.

The policy seems to be to let only the best get out and getting through the program is made harder for students who are Black-American, Spanish-American, or over 35.

There is no apparent discrimination in employment practices; however, minorities are very often offered only the least desirable shifts.

Pima College has a reputation of preparing students better than other colleges, but minorities often go elsewhere to avoid problems.

Priority Rankings

I. APPLICATION

- A. School districts with high minority enrollments offer less than an equal educational opportunity.
- B. Information on allied health professions and what is involved in getting into an allied health profession is generally lacking.

II. COMPLETION

- A. Faculty and staff negative attitudes regarding minority student potential discourage minorities from continuing in an allied health program.
- B. Lack of preparation in the sciences and mathematics in high school prolongs the time that must be spent in getting an associate degree.

III. MATRICULATION

- A. Minority students are delayed in or prevented from matriculating in allied health programs due to other (sometimes arbitrary) admission requirements not normally required for non-minority applicants.
- B. There is often a one to two-year delay in enrolling in an allied health program due to limited program slots; often, the selection of students is not made on the basis of date of application.

Faculty, Administrators and Other Staff

Participant Characteristics

SEX	ETHNICITY
Male - 3	Anglo-American - 3
Female - 3	Black-American - 1
	Spanish-American - 2

OCCUPATION
Allied Health - 2
Other - 4

Observations

In general, the faculty/administrator participants were knowledgeable about minority issues and at ease with each other. Their input indicated that some thought had been given to the minority student's plight; however, there was no sense or history of any organized group activity to remedy the problems except the reference made to a proposal submitted to a Federal agency to deal with admissions policies and the development of qualified applicants for allied health programs.

Discussion Summary

The discussion of barriers experienced by minority students dealt with the following areas.

Application

Pima College attracts many minority students due to an open door admissions policy and no recruitment efforts are necessary.

Minority applicants have a poor orientation to health careers.

Minorities enter allied health programs with language and reading disabilities and math deficiencies.

Minority applicants from certain school districts consistently score lower in screening tests.

There are few minority health professionals to serve as role models and some minorities are hampered by a defeatist attitude.

Minorities often come to Pima College with unrealistically high aspirations.

Minority counselors in high school have difficulty getting minority students to believe they can make it.

School districts of about equal distribution of minority and non-minority students still turn out ill-prepared minority applicants.

Minority students that display higher levels of ability will get more time from counselors while others will be routed into technical/vocational courses. Counselors rationalize that it is unnecessary to put a student in algebra, for instance, when the student will probably never use it.

Minority students choose certificate programs in order to become employed sooner.

Minority students are influenced by the family's resistance to higher education.

Matriculation

The screening process includes an analysis of general educational skills, testing for reading and math readiness and an interest inventory test.

Spanish-Americans usually apply for the Licensed Practical Nurse program due to low aspirations.

Financial need keeps minorities from considering longer programs and, aside from a few scholarships, very few financial aid sources are available. The financial aid office receives more applications than can be met.

Federally-funded financial aid sources have very stringent requirements regarding course load and number of years since graduation from high school.

Cultural fear (need to function in a predominantly Anglo-American society and being ostracized by peer group) are detrimental to efforts to recruit more minorities into allied health programs.

Completion

Financial need contributes greatly to the drop out rate and money is made available more readily for minorities with excellent preparation.

Completion is often determined by faculty attitudes and poor interpersonal relationships between student and instructor.

A need exists for a faculty development program.

Students have a tendency to blame failure in a program to the racist attitude of faculty members.

Instructional methods overlook the fact that minority students must function in two cultures or, as for the Yaqui Indians, to be tri-lingual in English, Spanish and Yaqui.

Due to lack of minorities on the faculty, students feel isolated and friendless.

Curriculum is determined by State Board test material and relevancy to world of work is questionable but any changes in curriculum must be approved by the licensing body.

Priority Rankings

I. APPLICATION

- A. High school preparation is inadequate in providing reading and mathematics skills especially in some school districts with high concentrations of minority students.
- B. Family and peer group resistance to post-secondary education affects the number of minorities who consider applying at Pima College.

II. COMPLETION

- A. Many minority students must spend at least one year in remedial or preparatory courses before being considered for admission to an allied health program, with the Emergency Medical Technician program which draws most of its applicants from city/government employment being the exception.
- B. The attrition rate is high, over fifty percent (50%), for all allied health programs and across ethnic groups, but especially impacts minority students.

III. MATRICULATION

- A. Failure in passing reading and math readiness screening tests keep minorities from entering directly into an allied health program.
- B. The attitude or unwritten policy that the institution has a responsibility to insure student success leads to subjective evaluations of applicant potential as a determinant of approval for matriculation.

CONFERENCE SUMMARY REPORT VII

SAN ANTONIO, TEXAS

Schedule

The conferences were convened on-campus at St. Philip's College in San Antonio. Faculty, staff and administrators met from 9:30 A.M. to 12:30 P.M. and the students met from 1:30 P.M. to 4:30 P.M. on June 30, 1975.

Background Data/Host Institution

St. Philip's College is one of two community colleges under the San Antonio College Union District in San Antonio,

Texas, and is located in a sector with a high concentration of minority residents.

The overall total enrollment at the St. Philip's campus is 6,266. The minority enrollment is fifty-one percent (51%) Spanish-American and twenty-six percent (26%) Black-American. Indian-American enrollment is not tabulated as a separate statistic. There are 262 students enrolled in the four (4) allied health occupations of X-Ray Technician, Medical Records Technician, Occupational Therapy Assistant, and Medical Laboratory Technician. Of the total allied health enrollment fifty-three percent (53%) are Spanish-American and twenty-six percent (26%) are Black-American. Beginning in September 1975, St. Philip's will also offer a course in Respiratory Therapy. National certification on all allied health programs has either been obtained or is in process of being granted.

Faculty, Administrators, and Other Staff

Participant Characteristics

SEX		ETHNICITY	
Male	- 4	Anglo-American	- 2
Female	- 4	Black-American	- 2
		Spanish-American	- 4
OCCUPATION			
Allied Health		- 4	
Other		- 4	

Observations

The participants were all involved in teaching an allied health occupation or in special counseling services for minority students. They appeared to be knowledgeable about existing minority barriers to allied health and to higher education in general. Conference attendance was fully sanctioned by the institution and was actively facilitated by an allied health staff member.

Discussion Summary

The following comments were made regarding barriers to minority students.

Application

Minority applicants are deficient in English and mathematics.

Students are not made aware of course requirements needed to continue education beyond high school.

Students are generally not given an explanation of the importance of college preparatory courses.

Students do not consider, and counselors do not explain the consequences of, just getting by in high school.

Many minority students are concentrated in several schools and are taught by persons that are not prepared or qualified teachers. Also, these teachers are distracted from the primary task of teaching due to a concern for completing course requirements for certification.

Students are grouped by reading ability and given the impression that, since they are not in a high academic group, they will not be able to go to college.

Career information is given late in high school, whereas emphasis should be placed on career education in elementary school.

Surveys have indicated that the majority of minority students are counseled into vocational/technical high school programs, and student feedback indicates that a primary emphasis is given to vocational/technical programs in many school districts.

Counselors may believe they are realistically counseling minority students not to look forward to a college education based on student ability evaluations at the elementary school level when these evaluations are based on biased testing or colored by stereotyping of minorities, the minority student's motivation is seriously undermined.

Counselors often do not guide minority students into college preparatory courses and generally counsel minorities to take related mathematics instead of algebra and vocational/technical course instead of chemistry, etc.

When a student changes his goals and objectives to include post-secondary education, it is very hard to make up course deficiencies.

A great number of minority high school students do not know about college prerequisites and entrance examinations.

There is a limited number of counselors for a large number of students and very few minority counselors in the school districts. In addition, teaching and counseling are viewed as separate functions but some teachers do take the initiative in counseling students.

Peer pressure may be a factor in the incidence of the low number of minority students in college preparatory programs.

Matriculation

Minority students have often been told that college entrance examination scores are not important.

Minority students are not made aware that college entrance examinations can be taken before graduating from high school and at no cost.

Some school districts sort who may take the entrance examination tests while still in high school.

Junior college counselors and instructors take too much for granted and expect applicants to be very aware of and familiar with the concepts of course scheduling and clock hours.

The screening process is often prejudicial to students if based strictly on assumptions and biases; for example, a minority applicant was placed in remedial courses because the I.Q. score on record was in the high nineties when, in fact, he had placed thirteenth among seniors in the nation and had been the class valedictorian.

Financial need deters minority students from applying for post-secondary education.

Many minority students have no idea of financial aid sources other than loan programs.

Procrastination in submitting applications reduces the possibility of being accepted.

The fact that students must pass national or state board examinations dictates that students be screened to insure ability to pass boards and curtail attrition rate; the college entrance examination cut-off scores vary depending on the discipline and those not accepted must be in a remedial program, and wait until next class start-up, usually the following year.

An elective course in orientation to health careers is offered and recommended to applicants without prior experience or knowledge of health careers.

Completion

The lack of a comprehensive college orientation program contributes to high attrition rate. Faculty often assumes students are familiar with the college environment, etc.

Lack of information regarding allied health career duties, career ladders and salary levels leads to discouragement and dropping out.

The academic requirements are excessive; i.e., theory covers more than most four year baccalaureate programs, 2,200 practicum hours are required by accrediting associations, and students must prepare for national comprehensives while maintaining a "C" average (a "C" in allied health is given for a 75 point score, whereas a "C" in a liberal arts program is given for a 70 point score).

Many students have been told they are dumb from kindergarten through twelfth grade and all convinced they can't make it and they don't.

It is very hard for faculty advisers to counsel students away from a program in which they feel the student will fail. Students are seemingly locked in on one choice.

Students fail due to being employed simply because they are not taking advantage of financial assistance programs.

Students do not take advantage of special services programs, such as counseling and specialized tutoring.

Peer groups do not develop until well into second year in spite of staff efforts to encourage it.

Peer group tutoring seems to be the most effective for minorities.

The transportation problem is addressed by structuring on-campus and off-campus attendance in day blocks but may be a factor in attrition.

Students cannot take advantage of tutoring sessions because of practicum.

Practicum experiences do not seem meaningful as students are expected to do the dirty work or menial tasks in a department; therefore, students do not really become proficient.

Textbooks are very expensive and students often must share textbooks or depend on departmental libraries.

No absences are allowed from practicum assignments.

Students who must work are hurt by the solid block scheduling of practicums.

Practicums are arranged on an informal agreement abses, thus St. Philip's must schedule practicums to suit sites and the limited number of slots provided by the sites.

Instructors need a broader basis of knowledge regarding all allied health programs.

St. Philip's is concerned with flooding the market since minorities are not aware of possibility of relocating in order to practice after certification/registry.

Priority Rankings

I. PREPARATION

- A. Counselors and instructors do not guide minority students into, or emphasize the importance of, college preparatory courses.
- B. Career information is provided towards the end of the high school senior year and students find themselves unprepared for the college level courses required for their career choice.

II. COMPLETION

- A. Employment due to financial need and lack of academic preparation prior to college entrance are dual factors of a high attrition rate for minorities.
- B. Allied health program requirements -- academic level and scope as well as practicum -- are excessive for a two-year program.
- C. Allied health program students, due to scheduling, are unable to take advantage of tutoring sessions.

III. MATRICULATION

- A. Some minority students must often spend a year in a liberal arts program to upgrade academic preparation before gaining entry into an allied health program.
- B. The limited number of student slots for allied health programs as well as the screening process defer entry into an allied health program for at least one year.

Student and Ex-students

Participant Characteristics

SEX	ETHNICITY
Male - 16	Anglo-American - 2
Female - 8	Black-American - 3
	Spanish-American - 19

ACADEMIC CONCENTRATION	STATUS
Allied Health - 24	Students - 24
Other - 0	

Observations

There were purposefully a larger number of participants in this conference compared to other conferences in order that priority rankings by group consensus in other smaller conference groups might be compared with a larger sample. The participants discussed barriers in relation to their own experiences. For many this was their first experience in group problem exploration.

Participants indicated that their participation in the conference was expected. Some were excused from previously scheduled seminars in order to participate.

Discussion Summary

The following comments were made regarding barriers to minority students.

Application

Most minority students come in with little or no preparation in mathematics and the sciences.

Minority students are generally not counseled into college preparatory courses even if making good grades.

Screening tests in high school to determine ability group placement do not really test for potential but test for knowledge acquired only.

Students categorized as having low achievement potential

are stigmatized and feel they are dummies. In addition, counselors and teachers have preconceptions of minority student potential which affect the type of counseling and encouragement provided minority students.

Poorer school districts with high concentrations of minorities do not offer the same quality educational programs.

Some financial aid sources are not available to older students coming back to school, due to restrictions based on time since graduation from high school.

Minority students receive no exposure to allied health careers.

Matriculation

Not enough help or information is given students entering a post-secondary educational institution.

Minority students find it hard to get letters of recommendation from professionals due to lack of contact.

Screening tests place students in remedial program for a year.

Late scheduling of interview sessions delays the notification of acceptance to allied health program.

The selection process and criteria are not known by minority students who feel that selection is often determined by the chairperson on other than strictly academic considerations.

Some financial aid is determined on the length of time since graduation from high school which discriminates against older students.

Grants must be matched by loans or work-study placement.

Some science and math courses do not transfer into allied health program.

Completion

The program workload is heavy, especially for students who must work part-time.

Financial need is a real problem and is aggravated by the fact that veteran's checks are often delayed, the financial

aid office is closed before allied health program students are free, after-duty hour appointments are not honored by financial aid office staff, students generally encounter hassles in applying for grants or loans and the same problems are encountered each semester.

The chairperson has too much control over who stays in the program and who is dismissed.

Too much material is covered in a short period of time and theory and application are scheduled too far apart.

Textbooks and lectures do not adequately cover the subject matter required to become good practitioner thus students must do a lot of individual study and research.

Instructors are not always aware of the changes in procedures adopted by the hospitals which serve as practicum sites.

Some courses seem unnecessarily detailed for the allied health career in question; for example, requiring two (2) semesters of anatomy in the medical laboratory technician program.

Public transportation is too time consuming as it takes two hours or more to travel from a practicum site to the college campus in most instances.

Practicum assignments involve forty (40) hours per week for six semester hours of credit and does not transfer to a baccalaureate program.

Practicum assignments consist of performing the menial tasks in a department, often without supervision, and of serving in the place of salaried technicians in some cases.

Priority Rankings

I. PREPARATION

- A. Due to lack of counseling into college preparatory courses, most minority students fail to take the mathematics and science courses necessary for post-secondary education or allied health programs.
- B. Screening for grouping by ability in high school consists of testing for knowledge acquired rather than ability or potential.

- C. Teacher and counselor preconceptions regarding minority student potential often determines whether or not a student is encouraged to take college preparatory courses.

II. COMPLETION

- A. Allied health programs cover a lot of material in too short a time and do not appear to be tailored to the allied health career.
- B. Textbooks are not comprehensive and instruction is not initiated at a basic level thus students must do a lot of independent reading and research to catch up with the instructor.
- C. Financial aid office hours, personnel attitude, and disbursement procedures hamper students from securing needed financial assistance.
- D. Since the practicum is deferred, there is no close relationship between theory and practice and the menial tasks assigned do not help students become good practitioners.

III. MATRICULATION

- A. The limited number of slots makes it difficult to get into allied health programs.
- B. Interview scheduling late in the school year does not allow for timely notification of acceptance into a program.
- C. Many applicants are referred into remedial courses and this delays enrollment into an allied health program for at least a year.

CHAPTER IV. PRIORITY RANKINGS

METHODOLOGY

As previously noted²¹, the values assigned to a grouping of barriers by topic area is useful for the sake of discussion and ordering diverse factors but in no way implies that a second and third ranking signifies relative unimportance to the first ranked item(s).

The contractor emphasized to conference participants that the rankings were a necessary indication of a group consensus regarding the group of barriers that should be addressed to insure parity for minorities. Thus, the priority rankings cited reflect the area conference's assessment regarding which barriers should be addressed in order to achieve a comprehensive and far reaching impact on the underrepresentation of minorities in allied health professions' educational programs.

TOPIC AREAS

Identical rankings of topic areas by faculty and student sessions occurred in only three out of seven conferences. In one conference the third ranking topic area was the same, but the first and second ranking topic area were

²¹See Above, p. 20

dissimilar. In three conferences, the priority ranking of all three topic areas was dissimilar.

A composite illustration of the priority rankings assigned by topic area indicates that barriers under the topic area of application were most often considered of first priority by both faculty and student sessions.

The faculty sessions, however, were equally divided in stressing matriculation and completion barriers as second and third ranking whereas student sessions most often cited completion barriers as second ranking and matriculation barriers as third ranking.

TABLE 12.

PRIORITY RANKINGS BY TOPIC AREAS, AND
STUDENT AND FACULTY SESSIONS

Topic Areas	Priority Ranking					
	I		II		III	
	Fac.	Std.	Fac.	Std.	Fac.	Std.
Application	5	6	1	0	1	1
Matriculation	1	0	3	2	3	5
Completion	1	1	3	5	3	1

BARRIERS

Priorities

Most often mentioned as priority barriers in the faculty sessions were (1) the lack of appropriate counseling at the high school level, (2) minority students' failure to meet institutional and programmatic requirements, and

(3) bias on the part of instructors and other staff, and (4) admission requirements and academic preparation as significant barriers in that order.

Faculty/Student Perspectives

Counseling

The faculty considered the high school counseling program as being inadequate for all students due to student-to-counselors ratios and the counselor's general lack of knowledge and awareness of allied health careers and programs. In some instances, faculty session participants acknowledged that some counselors might ignore minority students due to bias or a stereotyping of minorities.

Students were unanimous in their appraisal that high school counselors seemed indifferent to minorities or, at best, determined to discourage minority students away from college preparatory programs because, in the students' opinion, counselors generally assumed minorities were unable to cope with the hard sciences and post-secondary education.

Admission Requirements

The faculty stressed that admission requirements for allied health programs posed a problem for most applicants; and that minorities most often were eliminated on grade point average and college entrance examination requirements only because high standards had to be maintained to insure that patient lives would not be endangered.

The students, however, felt very strongly that grade

point average and college entrance examination requirements should be subordinated to fair and impartial evaluations of a student's potential and degree of commitment to serving people as an allied health professional.

Financial Need

The faculty were aware that finances were a factor in the retention of minority students and acknowledged that most minority students probably chose a two-year or technician-level training program due to a strong desire to become financially independent as soon as practicable.

The students emphasized that the financial aspect of pursuing post-secondary education was of utmost importance in setting career goals. The family's economic status, therefore, sets certain limitations on the career aspirations of minority students, even more so than for non-minority students, because minority students are generally ignorant of financial aid sources except for loan programs. The common complaints regarding financial need and aid included the following: (1) that high school counselors distributed information to minorities on loan programs only, (2) that financial aid office staff were insensitive to minority applicant needs and generally overlooked the possibility of securing a scholarship or private foundation grant for minority students, and (3) that minority students were often required to secure a loan in order to qualify for a basic or supplemental grant.

Academic Preparation

The faculty most often discussed this barrier as being a combination of inadequate counseling and generally poor quality education for all students. It was noted that most high school graduates were deficient in reading skills, verbal and written communication skills, and mathematics. Minority students were considered even less well prepared due to meeting only the minimum requirements in the sciences.

The students emphasized that minorities were deficient in academic preparation due to the unequal educational opportunities provided minorities. Also, that parental and counselor/teacher expectations, cultural influences (role models), and peer pressure definitely influenced the academic concentration or course choices of minority students.

Course Content and Requirements

Faculty participants stressed the fact that course content and curriculum requirements in allied health programs were very demanding of even the best prepared students but that they were powerless to effect any changes in course content. Faculty participants explained that screening tests and interviews were used to insure that an applicant was counseled realistically and that developmental studies (remedial) programs were utilized prior to undertaking an allied health program. Faculty participants acknowledged that the additional year or more of developmental studies often discouraged minority students from matriculating in

an allied health program.

The students, on the other hand, acknowledged that remedial programs were useful, but that some remedial course requirements did not seem to have a bearing on the skills required of the profession for which they were to be trained. A need for more flexibility in course scheduling, entry dates, and supportive services was repeatedly mentioned. The criticism of the number of practicum hours required and the type of training received was included in the discussion of course requirements. In many instances, objections were voiced regarding the practice of assigning students to perform salaried personnel duties with little or no supervision, or of being assigned the performance of menial tasks to the exclusion of practice and observation alongside a professional.

Bias and Stereotyping

Faculty session participants noted that the incidence of bias against and stereotyping of minority students as being an accident of personality traits of one or another faculty or staff member at the institution. Faculty session participants dealt with this issue as an observation that minority students had a tendency to blame faculty and staff bias and the stereotyping of minority students for failures in courses or programs.

Student session participants, however, reported bias and stereotyping as being institutionalized and not merely.

a matter of misinterpreting an individual faculty or staff members' actions. The student participants were of the opinion that high minority student attrition rates could be attributed in part to this factor.

CHAPTER V. SYNOPSIS OF BARRIERS AND RECOMMENDATIONS

STUDY PROJECT HYPOTHESIS

The study project hypothesis stated, "there are certain barriers (attitudes, constraints, or practices) which act upon minority population groups to prevent, hinder, restrain, or discourage educational achievements in post-secondary allied health fields. These barriers can be grouped into the following categories:

- ø Financial,
- ø Educational,
- ø Institutional Practices and Policies Governing Recruitment and Admission,
- ø Family and Culture,
- ø Geographic,
- ø Lack of Role Models,
- ø Lack of Adequate Counseling Services,
- ø Perception and Knowledge of Allied Health Field, and
- ø Lack of Adequate Tutorial Programs.²²

These categories of barriers were proposed as the framework

²² Southwest Program Development Corporation, "A Study of Minority Group Barriers to Allied Health Careers in the Southwest," loc. cit., pp. 14 and 15.

for developing a survey instrument. A change in methodology did not obviate their applicability to this study, therefore the hypothesis is reflected in the topics of discussion and has been used to assemble data by categories of barriers for the synopsis and in developing concise statements of recommendations.

METHODOLOGY

The verbal input from all discussion sessions was grouped under each of the category of barriers listed. The order of listing the categories was determined by the degree of emphasis given each matter by both the faculty and student sessions based on the number of times a subject was introduced and that conference participants addressed the matter, regardless of some apparent differences in perspective between the faculty and student sessions.

The synopsis highlights the basic issues discussed in all sessions. The recommendations include either a statement of issues that should be addressed by the appropriate agencies, institutions or certifying associations in conjunction with federal and/or state legislative bodies, or recommends action that should be taken through programmatic efforts.

The barriers delineated in this part were found to be applicable to all minority groups. Issues relating to specific minority groups are covered in the conference summary reports.

²³ See Above, pp. 8 and 9.

THE BARRIER: ACADEMIC PREPARATION

Synopsis

Both the faculty and student conference participants raised the issue of the unequal educational opportunities provided minority students in elementary and secondary school systems with large minority enrollments. In addition, minority students are traditionally counseled into technical and vocational courses in high school which do not include the mathematics and science courses required by allied health programs as prerequisites for admission. Information on allied health careers and the required preparatory courses is rarely transferred by faculty or counselors at either the high school or junior college level. Career day programs tend to focus on the medical professions (physician, pharmacist or nurse) but seldom on the allied health professions.

Recommendations

Counselor and faculty orientation to allied health career prerequisites, curriculum, career expectations and options should be programmatically provided, particularly in secondary institutions with high minority enrollment. Teams of allied health professionals and counselors should reinforce and augment career guidance counseling early in the high school years. Minority allied health professionals and counselors should be visible and active team members.

An effective program of career guidance and counseling should be legislated and implemented such as proposed in House Bill HR 3270, Section 101. (See Appendix M)

THE BARRIER: COUNSELING

Synopsis

Career counseling for minority students was reported to be almost exclusively a matter of arbitrarily channeling minorities into vocational and technical courses and offering no encouragement and sometimes actually discouraging minorities from undertaking college preparatory courses.

Counselors were consistently reported to be uninformed about allied health careers and in some instances regarding allied health as a second best alternative to medicine, dentistry or nursing. Most allied health career choices were made as the result of personal contacts or job-related experiences.

Recommendations

Allied health career information should be conveyed to minorities by minorities early in the high schools years. Special teams of allied health professionals need to augment the perfunctory treatment of allied health careers during career day programs.

Counselors need a useable manual on allied health careers instead of the usual flood of unrelated brochures. The counseling capabilities of persons working in areas with high minority youth concentrations should be strengthened through training programs.

THE BARRIER: ALLIED HEALTH CURRICULUM

Synopsis

Many minority students entering allied health career studies are relegated to remedial or support programs before starting the allied health programs, which lengthens the educational process by one or two years. The remedial work was repeatedly reported by students to be irrelevant to the allied health program, and usually required of minority students only. Faculty on the other hand were firm in their insistence of the need for basic skills improvement in order to insure a higher rate of completion by minority students and a higher success rate in certification examinations by program graduates.

In several student sessions, the issue of student exploitation at the practicum site was discussed. The number of hours were considered excessive for the poor quality of training provided insofar as students often perform tasks with little or no supervision since they replaced salaried personnel or served in the place of salaried personnel.

The step-locked rigidity of many allied health curricula does not allow for quick re-entry should a student fail a course. The normal waiting period is a year but can be as many as two years, depending on the availability, of open slots. Many minority students transfer into another discipline rather than wait for an opening.

The design of allied health curricula is influenced by the American Medical Association Council on Allied Health

Medical Education certification standards and by state board requirements for licensure and accreditation; however, there is no uniformity among the states in the licensure requirements for allied health professions. Allied health core curriculum models are rare. The attrition rate for minorities in allied health programs was reported to be fifty per cent (50%) or higher in some areas.

Retention problems were repeatedly attributed to human relations conflicts between white faculty and minority students rather than academic incompetence.

Recommendations

Allied health career counseling should begin early in the high school years.

Tutorial programs for improving basic skills and grounding in health science course content should be concentrated in summer sessions prior to allied health program matriculation.

State and regional consortiums should be established to develop inter-institutional core curriculum.

Faculty development seminars should be conducted independent of the institutions and focus on minority attrition rates and associated problems in allied health programs.

THE BARRIER: INSTITUTIONAL RECRUITMENT PRACTICES

Synopsis

Minority recruitment efforts for allied health programs are the exception and those that exist are minimal at best. The focus is generally on those minority students with exemplary qualifications.

Most literature and media material is biased as only dominant society members are depicted as the allied health professionals.

Recommendations

Develop and distribute literature and media material depicting minorities as allied health professionals, especially for school districts and communities with high concentrations of minorities.

Design and implement recruitment programs for allied health programs structured to reach minority students and which offer pre-admission counseling and supportive services.

THE BARRIER: INSTITUTIONAL ADMISSION PRACTICES

Synopsis

A growing reluctance to admitting minority students to post-secondary education institutions was reported and referred to as "white backlash." Most allied health programs use screening tests to determine the need for remedial training prior to being considered for admission. Both faculty and student session participants discussed the issue of the cultural bias against minorities built into most testing instruments.

Admission criteria usually includes cut-off grade point averages and college entrance examination composite scores, letters of recommendation and subjective evaluations of student potential to successfully complete an allied health program. Faculty session participants generally stressed the validity of test results as indicators of ability to meet allied health program requirements, and the importance of letters of recommendation to gauge student potential. The student session participants, on the other hand, stated that grade point averages did not reflect progressive improvement, that biased screening instruments discriminated against minorities, and that letters of recommendation were heavily weighted to discriminate against minorities since minorities usually did not have access to letters of recommendation from prestigious professionals as often is the case for dominant society applicants. The matter of subjective evaluations was considered detrimental to

minorities by student session participants due to the fact that a minority applicant's commitment is not given due consideration.

Allied health program enrollment quotas effectively screen out minorities considered "high risk" students; that is, those students who meet the minimum requirements but are deemed incapable of overcoming cultural and educational handicaps. Student session participants observed that their impression was that minority quotas for allied health programs were established on the basis of the number of minorities who passed state boards.

Minority students reported that undergraduate course work at the same institution did not transfer into the allied health program, even the science courses they had been advised to take were not those required in the allied health program of their choice.

Recommendations

Allied health program administrators and/or administrative staff of institutions offering allied health training should insure that undergraduate course offerings and course content in post-secondary institutions (regionally and statewide, at least) satisfy allied health program prerequisites.

The appropriate federal and/or state agency should scrutinize testing instruments for culturally biased content. Testing instruments that produce reliable indicators of potential should be developed and strongly recommended for

implementation as an alternative. The accepted practice of using grade point averages and college entrance examination scores as admission criteria exclusive of other factors should be investigated.

THE BARRIER: INSTITUTIONAL RETENTION PRACTICES

Synopsis

Completion of an allied health program by minority students is often determined by faculty attitudes and interpersonal relationships between instructors and minority students. Many minority students seem to experience a continual discouragement to continue in a program. Faculty and staff were reported to sometimes (1) assign lower grades to minority course work regardless of the quality of the work, (2) adjust grading curves to insure passing grades for non-minority students to the detriment of the letter grade achieved by minority students, and (3) often make attempts to channel minority students into a lower level of training.

Both faculty and student session participants addressed the retention issue, although the student session participants identified high attrition rates as a consequences of bias and stereotyping whereas the faculty session participants tended to consider these problems a matter of personality conflicts.

Recommendations

A series of training sessions should be developed and implemented to explore the ramifications of institutionalized bias against and stereotyping of minorities.

THE BARRIER: FINANCIAL NEED AND AID

Synopsis

The need for financial aid was reported to be a problem that spans application, matriculation, and completion of allied health careers for minorities. The major problems were the lack of information about available resources, lack of assistance in completing a lengthy and tedious application form, and the inappropriateness of the criteria of need which is based on parental income rather than a student's actual needs. A recurring issue was the limited number and amount of grants made available to minorities in proportion to the loan of comparable amount. Eligibility for some financial aid is determined on time since graduation from high school which discriminates against older students.

Recommendations

Dissemination of financial aid information and assistance with the process of application should be undertaken with a special emphasis on minority student needs.

The criteria of need should be examined for its relevance to minority student needs. Both institutions offering allied health programs and the government should make efforts to increase grant money for minorities in allied health programs.

THE BARRIER: FAMILY AND CULTURAL INFLUENCES

Synopsis

Minorities are influenced by peer pressure, parental expectations and counselor/teacher appraisals to aspire to those careers and career levels traditionally held by minorities in the community. Minorities do not have a tradition of entering health occupations in representative numbers.

Recommendations

Dissemination of information regarding allied health careers, career levels, employment and career mobility possibilities, salary levels and means of financing an allied health course of studies should be effected in such a way as to impact the total minority community in order to develop an increase in minority applicants to allied health programs.

THE BARRIER: TUTORIAL AND SUPPORTIVE SERVICES

Synopsis

Tutorial and supportive services scheduling is often concurrent with allied health program course and practicum scheduling.

Faculty and staff insensitivity to minority student needs is manifested in a lack of effort to identify students who need assistance early enough in the course to insure successful completion.

Minority students are also reluctant to utilize tutorial and supportive services programs because it is construed as an indication of weakness. In addition, tutorial programs are usually tailored to meet dominant society student needs and are not designed to cover basic principles.

The impact of minority-oriented supportive services is negated by the absence of formally recognized student advocacy powers for minority affairs office staff.

Recommendations

Tutorial programs should be aligned with allied health program requirements and needs, and should be scheduled within the structure of allied health course programming.

The range of supportive services offered should encompass student advocacy powers for minority-oriented program staff.

THE BARRIER: PERCEPTION AND KNOWLEDGE OF ALLIED HEALTH

Synopsis

Minorities acquire a knowledge of allied health professions and a perception of their functions primarily by word of mouth, on the job training in a hospital setting, or as a result of employment in a hospital in the dietary or housekeeping departments.

Most minorities are never exposed to allied health careers in secondary education institutions and are generally unaware of post-secondary allied health training programs in their immediate area.

Recommendations

Counseling personnel and teachers in elementary and secondary schools should be provided with information about (1) allied health careers, (2) allied health training programs, and (3) financial aid sources for allied health training. This training would supplement and augment the career education programs or efforts of any school district.

THE BARRIER: ROLE MODELS

Synopsis

Health occupation minority role models rarely include minority allied health professionals.

The majority of minority role models are in other professions and sometimes are assessed by minority students as having placed considerable distance between themselves and their cultural background and the student's cultural milieu.

Recommendations

Minority allied health professionals should be recruited from the immediate community or the adjacent metropolitan area to make presentations to minority student and parent groups regarding the opportunities for minorities in the allied health professions. The prerequisites required by the most accessible allied health training programs should be discussed.

Minority students in allied health programs should be recruited for a similar effort, or as a complimentary effort to the first recommended.

THE BARRIER: GEOGRAPHIC

Synopsis

Very few comments were made regarding difficulties with commuting or housing or the inaccessibility of training facilities. The lack of emphasis on this category of barriers is possibly a result of the conference setting - metropolitan areas - and the fact that many minorities in allied health programs are older students pursuing an alternative career. The comments made were with respect to the necessity to provide one's own transportation as transit system schedules rarely served the training institution and practicum sites with rapid transportation.

Recommendations

A special study should be undertaken to ascertain the impact of residency - rural versus urban - on the incidence of minority application and matriculation in allied health programs.

CHAPTER VI. CONCLUSION

STUDY REVIEW

Literature Search

The contractor initiated the study by preparing an annotated bibliography and an analysis of the relevant literature as well as a summarization of available statistical data.

The contractor found that a number of barriers had been identified in previous studies. The most significant findings were discussed in the report, "Minorities and Allied Health," as previously noted. The categorization of barriers in this report differed slightly from the study project hypothesis²⁴ but in fact dealt with almost every aspect of those barriers categories predicated for the study.

The section on financial barriers correlated socio-economic status to minority student enrollment by type of college; completion rates; and federal subsidy and financial aid patterns. Minority students were found to be most often (1) enrolled in junior colleges or less expensive and less selective four year colleges; (2) concentrated

²⁴See Above, p. 120.

disproportionately in the undergraduate years; (3) substantially underrepresented in post-secondary institutions; (4) less likely to complete college; and (5) received more work study and loan funds than any other kind of financial aid.

The section on the educational barriers cited poor schools, racial and cultural isolation, negative attitudes of teachers and counselors, and high dropout rates as being part of the picture of educational neglect. In addition, special note was made of the incidence of stereotyping, the minimal levels of non-critical teacher/student interaction, and biased testing instruments.

Admissions barriers were reported to exist as a consequence of an overreliance on the use of meritocratic criteria, especially by senior colleges; and, even though junior colleges espoused a continuation of open admissions policy, the priorities and poor procedures being implemented were detrimental to insuring equal access to minorities.

The discussion of family and cultural barriers set forth the opinions generally held by educators regarding the ability of minority students to overcome their handicaps; but concluded that, in fact, there was no way to prove the hypothesis that the cumulative effect of being from a deprived environment was a lack of motivation.

The accessibility of post-secondary educational institutions as the determinant of minority enrollments in allied health professions educational programs was the focus of

of the section on the distance barrier. The conclusion drawn was that the public two-year community college was the most likely source of minority allied health personnel or candidates for allied health baccalaureate programs.

Not all potential barriers, nor all the aspects of any one of them, were examined closely due to the dearth of literature on minority group barriers. The contractor concludes that there is still an obvious and pressing need for a detailed examination of minority group barriers and for the generation of relevant and timely data on the barriers which prevent minority group members from entering and completing allied health professions educational programs.

Statistical Data Analysis

The contractor utilized the 1970 Census to compare all current health worker data collected from the six (6) states in the geographic contract area. Differences in the number of health workers reported were considered in the context of concomitant increases in total population and labor force. A baseline of additional information was compiled that not only provided a general overview of the minority groups in the Southwest, but also served as a measure of comparison for the analysis of the current data. (See Appendix H, pp. 160 to 165.)

The document analysis resulted in a series of tables statistically summarizing Black-American, Indian-American,

and Spanish-American representation in allied health education programs and occupations in the Southwest. Problems encountered and procedures used are included in the explanations of the Tables. (See Appendices I, J and K, pp. 167 to 174.)

In the process of collecting and analyzing allied health student and worker data from the Southwest, the insufficiency of secondary data became apparent.

Only four (4) of the six (6) Southwestern states had conducted comprehensive health manpower surveys: Arizona, Colorado, Oklahoma and Texas. Of these, only Texas and Arizona had published data concerning detailed student enrollment in allied health training programs and only Arizona included an analysis of minority students. Minority student enrollment data were obtained from Texas and Oklahoma but only in the form of computer printouts. The four (4) states could not provide a race analysis of their health workers. Texas and Arizona utilized basically the same questionnaire and definitions of allied health careers in determining their supply of health workers and the health manpower surveys were under the auspices of health organizations, whereas in Oklahoma and Colorado the surveys were conducted mainly by state employment and educational agencies.

Allied health information from California and New Mexico was scant. While California had developed an operable

network of health services and educational activities, there were no recent comprehensive health manpower surveys available for the project's needs. Of all the states, New Mexico had the least information available. Repeated efforts to obtain information from New Mexico resulted in the advice that information would have to be collected from primary sources. One exceptional health manpower survey was available from New Mexico. This survey, however, was limited to nursing careers. The New Mexico Regional Medical Program had a manpower registry, but it was incomplete.

The contractor concludes that the paucity of current and relevant data from some Southwestern states is a result of a variety of factors. The principal one is probably lack of finances to conduct surveys, and to maintain and operate data banks. Where data is being collected, lack of adequate funds prohibits a comprehensive collection of allied health information, especially if standardized data needs have not been established. In effect, this means that some allied health surveys are not collecting either minority group data, enrollment data, or even employment data.

Consequently, the contractor recommends (1) that central and coordinating state and regional authorities be established to assume the responsibility for the on-going collection and analysis of health manpower data, (2) that

standardized data requirements and universal definitions of allied health careers be developed (3) that comprehensive health manpower surveys identifying minority group health workers, students and potential manpower resources be conducted, and (4) that comprehensive manpower planning and manpower development efforts be instituted.

Area Conferences

In spite of the obvious limitation in implementing the third phase of this study (namely, that statistical verification could not be obtained without a survey instrument of the results of the interviews conducted with allied health professionals and students and others directly involved in or impacting the recruitment of minorities into allied health professions educational programs), the contractor's analysis of the barriers is postulated on the basis that the input derived from the area conferences was principally experiential and therefore a valid indicator of the barriers extent in the Southwest.

The contractor, therefore, proposes that the Division of Associated Health Professions (hereinafter referred to as the Division) reiterate its commitment to increasing minority group member representation in allied health professions by developing and implementing national impact action plans and regional programmatic efforts to address the complexity of problems identified in this national study by the three contractors.

The contractor also recommends that programmatic efforts should be designed and implemented to address all ethnic minority groups without excluding programmatic elements dictated by a specific group's needs.

PROGRAM RECOMMENDATIONS

National Efforts

Manpower Information

The Division should initiate appropriate steps to insure that standardized data requirements are developed on allied health manpower to include minority group representation in allied health professions, and geographic distribution of allied health workers.

Manpower planning

The Division should initiate the appropriate steps, in coordination with governmental agencies and professional associations, to develop universal definitions of allied health careers, to standardize certification and registry requirements, to develop model salary structures and career mobility ladders within occupational categories, and to insure that allied health manpower registries are maintained at least on a regional basis.

Affirmative Action

The Division should insure that the design of a data collection system include the capability of monitoring and

evaluating compliance with appropriate equal opportunity provisions for increasing the training and retention of ethnic minorities in allied health professions educational programs.

Regional Programs

Manpower Development

The Division should fund regional comprehensive allied health manpower development programs that address the need for disseminating allied health career information to minority group members, providing allied health career counseling and recruitment of minority group undergraduate students, providing a full complement of supportive services to minority group students in allied health professions educational programs, identifying minority group members unable to secure admission to health occupations educational programs and providing alternative career counseling services, organizing health consortiums to formulate course curriculum models and to develop interinstitutional cooperative agreements regarding credit transfers, and providing allied health occupations placement services.

Minority Recruitment

The Division should fund regional pre-allied health counseling and information dissemination programs to address the need for augmenting the career counseling efforts of public school districts laboring under financial constraints

to insure that minority group students are presented with viable alternatives to those health occupations traditionally held by minorities in their community, developing cooperative arrangements between public school districts and post-secondary education institutions for the provision of health occupations pre-professional courses or health-career readiness mini-mesters, and an intensive recruitment effort of minority students at the secondary school level to insure adequate academic preparation for allied health professions educational programs.

Financial Assistance

The Division should investigate regional needs for federal financial assistance levels and the types of financial aid needed to insure that equal access to post-secondary education institutions and allied health professions educational programs is possible for qualified, low socioeconomic status youth.

APPENDIX A

LIST OF ALLIED HEALTH PROFESSIONS INCLUDED IN THE STUDY

1. Medical Technologist
2. Optometric Technologist
3. Dental Hygienist
4. Radiologic Technologist
5. Medical Record Librarian
(Medical Records
Administration)
6. Dietitian
7. Occupational Therapist
8. Physical Therapist
9. Sanitarian
10. X-Ray Technician
11. Medical Record Technician
12. Inhalation Therapy Technician
13. Dental Laboratory Technician
14. Sanitarian Technician
15. Dental Assistant
16. Ophthalmic Assistant
17. Occupational Therapy Assistant
18. Dietary Technician
19. Medical Laboratory Technician
20. Optometric Technician

APPENDIX B

Southwest Program Development Corp.

Post Office Box 5600
San Antonio, Texas 78201
512/696-7230

SAMPLE

Dear

As per our telephone conversation, we are providing detailed information on the purpose of our planned conference. Enclosed is a statement of the Purpose of the Conference explaining the conference format and requirements.

While the attached information packet is primarily for your perusal, it may also be of interest to participating faculty and administrators. For distribution to students invited as conference participants, you will be provided with letters that include a concise statement of purpose (see enclosed sample letter).

For planning purposes it is essential that you indicate your participation and return the enclosed forms listing the student and faculty/staff participants within ten days upon receipt of this letter. Can we tentatively plan on a last week in April conference? We will again be contacting you by telephone confirm your participation and conference dates.

If you have any questions, feel free to contact me or Ms. Martha Reyes.

Sincerely,

Project Director

Enc.

PURPOSE OF CONFERENCES

Health planners, educators and guidance counselors have worked diligently to increase representation of minority group members in allied health* programs. They are also aware of a wide and complex variety of factors which have discouraged minority group members from seeking professional status in the allied health field. Minority group members who are currently enrolled in allied health programs, as well as those that have not successfully completed a program, can therefore provide insight into barriers which might be more significant for one minority group or one geographical area.

Southwest Program Development Corporation (SPDC) is currently under contract with the Department of Health, Education and Welfare, Bureau of Health Resources Development to identify barriers that prevent minority students from entering or completing allied health career programs. SPDC is one of three contractors nationwide that will be convening minority students, faculty, and administrators in order to document their perceptions of those barriers. Our area of concern is the Southwestern portion of the United States, namely, the states of Arizona, California, Colorado, New Mexico, Oklahoma, and Texas.

Specifically, the purpose of the conferences will be to provide a forum in which ideas and information can be generated to further identify and illuminate barriers relative to entry and completion of allied health career programs. Our aim is to involve participants with diverse backgrounds and who have had different experiences in their efforts to matriculate in allied health career programs. Students invited should represent: (1) two or more allied health professions; (2) two or more allied health schools; and (3) two or more minorities (Spanish speaking, Black, Indian). We are also interested in including as participants minority students who matriculated but were unsuccessful in completing their allied health program and minority students who are presently enrolled in an allied health program. Enclosed are letters that can be given to the students briefly explaining the purpose of conferences.

Another purpose of the conferences is to convene faculty, administrators, and staff (minority-oriented counselors, coordinators, and others responsible for minority affairs) for an informal discussion of the barriers facing minority students who seek admission to or who are enrolled in allied health career programs. The faculty, administrators and staff participants should also represent: (1) two or more allied health professions; (2) two or more allied health schools; (3) two or more minorities (Spanish speaking, Black, Indian); and, if possible, (4) high school and vocational guidance counselors.

We are interested in convening a small group for each conference, namely, ten participants per conference. We anticipate an afternoon session with students, to include dinner, and a late morning session with faculty, staff and administrators starting with a luncheon. Group sessions will normally not exceed three (3) hours. Our conference schedule will be set up at the convenience of the participants over a two day period. However, SPDC staff will restructure the conference for a one day effort if requested or in order to meet your schedule.

Your cooperation is very important to this study, particularly when the careful selection of the small number of participants is crucial to the validity of the information to be gathered and in the preparation of the final report to the Bureau of Health Resources Development.

Be assured, however, that no information will be made public or released to the Bureau of Health Resources Development in any form that will permit identification of the response of any specific institution, program, or individual. The only reason for requesting identification of respondents is to increase the reliability of the data by enabling the contractor (SPDC) to analyze the group characteristics for compliance with the criteria delineated by the study.

Thank you for your attention and thank you in advance for your participation.

*Allied health professions for purposes of this research include:

Medical Technologist
Optometric Technologist
Dental Hygienist
Radiologic Technologist
Medical Record Librarian
(Medical Records
Administration)
Dietitian
Occupational Therapist
Physical Therapist
Sanitarian
X-Ray Technician

Medical Record Technician
Inhalation Therapy Technician
Dental Laboratory Technician
Sanitarian Technician
Dental Assistant
Ophthalmic Assistant
Occupational Therapy Assistant
Dietary Technician
Medical Laboratory Technician
Optometric Technician

Southwest Program Development Corp.

Post Office Box 5600
San Antonio, Texas 78201
512/696-7230

SAMPLE

Dear

Southwest Program Development Corporation (SPDC) is one of three research organizations contracted by the Department of Health, Education, and Welfare, Bureau of Health Resources Development, to convene conferences with minority students, ex-students, faculty, staff, and administrators in allied health career programs across the country. These conferences will be convened by SPDC in Arizona, California, Colorado, New Mexico, Oklahoma, and Texas.

The purpose of the conference is to discuss problems encountered by minority students in entering and completing their course of studies in allied health professional programs. We would like to ask your perceptions of the various factors that enter into the successful achievement of three steps in your educational program: application, matriculation, and completion. We hope that your participation in this discussion will help to identify problem areas according to their importance to minority group members.

Please be assured that all information will be held strictly confidential and is being collected for research purposes only. No information that will permit identification of the response of any specific individual will be made public or released.

The conferences will be held with faculty, staff, and administrators only and will be limited to no more than three hours. A dinner is also scheduled for each conference session.

We are looking forward to meeting with you.

Sincerely,

Project Director

Enclosure: Conference Agenda

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Southwest Program Development Corp.

Post Office Box 5600
San Antonio, Texas 78201
512/696-7230

SAMPLE

Dear

Southwest Program Development Corporation (SPDC) is one of three research organizations contracted by the Department of Health, Education, and Welfare, Bureau of Health Resources Development, to convene conferences with minority students, ex-students, faculty, staff, and administrators in allied health career programs across the country. These conferences will be convened by SPDC in Arizona, California, Colorado, New Mexico, Oklahoma, and Texas.

The purpose of the conference is to discuss problems encountered by minority students in entering and completing their course of studies in allied health professional programs. We would like to ask your perceptions of the various factors that enter into the successful achievement of three steps in your educational program: application, matriculation, and completion. We hope that your participation in this discussion will help to identify problem areas according to their importance to you as a minority group member.

Please be assured that all information will be held strictly confidential and is being collected for research purposes only. No information that will permit identification of the response of any specific individual will be made public or released.

The conferences will be held with students only and will be limited to no more than three hours. A dinner is also scheduled for each conference session,

We are looking forward to meeting with you and learning from you.

Sincerely,

Project Director

Enclosure: Conference Agenda 164

APPENDIX C

CONFERENCE SCHEDULE

DATE:

TIME:

SITE:

CONFERENCE AGENDA

- I. INTRODUCTION OF SPDC PERSONNEL
- II. PURPOSE OF THE CONFERENCE
- III. INTRODUCTION OF PARTICIPANTS
- IV. DISCUSSION OF TOPIC AREAS RELATIVE
TO APPLICATION, MATRICULATION AND
COMPLETION OF ALLIED HEALTH PROGRAMS
- V. SUMMARIZATION
- VI. DINNER

CONFERENCE PARTICIPANTS FORM I

(Faculty, Administrators and Other Staff)

Contact _____

Institution _____

Telephone Number _____

LIST OF PARTICIPANTS

Name	Institution Represented	Title and Occupation	Local Address	Telephone Number
------	----------------------------	-------------------------	------------------	---------------------

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.

NOTE: No information will be made public or released to the Bureau of Health Resources Development in any form that will permit identification of the response of any specific institution, program or individual.

CONFERENCE PARTICIPANTS FORM II (Students and Ex-students)

Contact _____ Institution _____
 Telephone Number _____

LIST OF PARTICIPANTS

Name	Institution Represented	Allied Health Program	Local Address	Telephone Number
------	-------------------------	-----------------------	---------------	------------------

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

NOTE: No information will be made public or released to the Bureau of Health Resources Development in any form that will permit identification of the response of any specific institution, program or individual.

O. Box 5600, San Antonio, Texas 78201

APPENDIX E

[illegible]

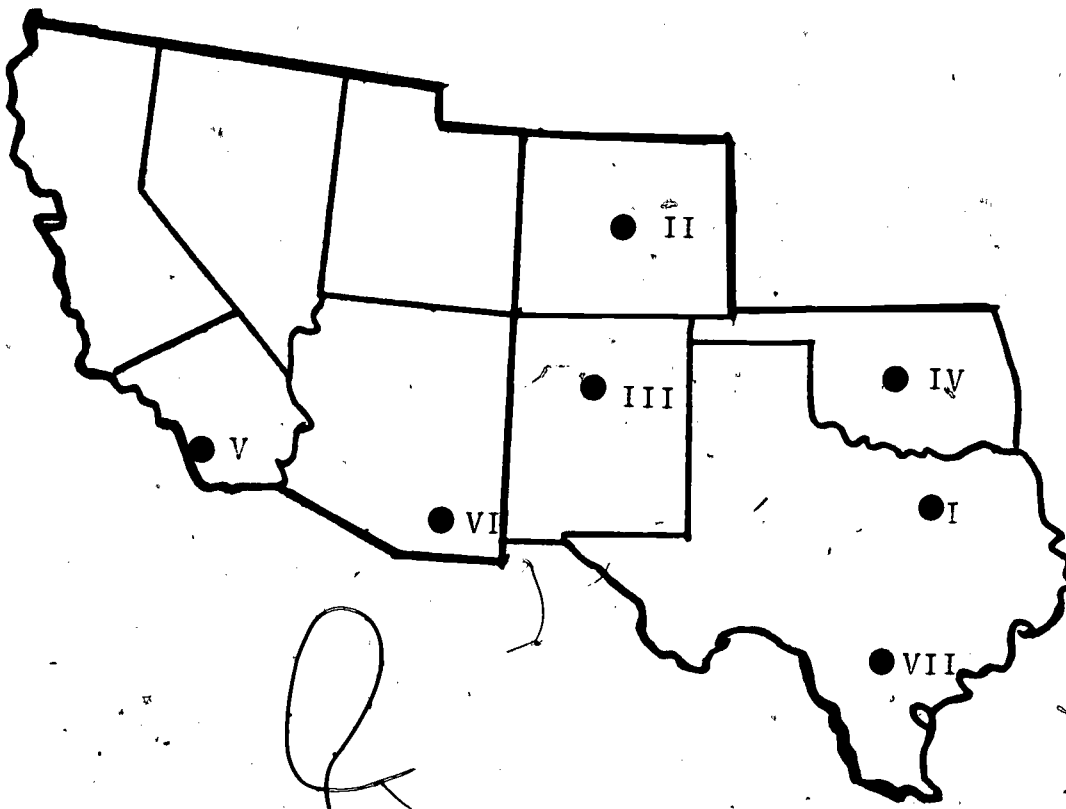
Sheet Number

I hereby authorize Southwest Program Development Corporation, contractor, to submit my name, address and telephone number to the Department of Health, Education and Welfare, Bureau of Health Resources Development, in order to be considered for participation in a national conference to be convened by the Bureau in the fall of 1975.

[illegible]

APPENDIX G

GEOGRAPHIC CONTRACT AREA



● CONFERENCE SITES

TABLE 1.1 GENERAL DEMOGRAPHIC INFORMATION, ARIZONA, 1970.

ARIZONA	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN
¹ Population	1,770,893	479,510	333,349	93,508	52,653
Secondary School ² Student Enrollment	370,670	98,938	70,446	12,942	15,550
Post Secondary ³ Student Enrollment	56,897	6,570	4,052	1,336	1,182
Median School Years Completed ¹ Persons 25 years old and over	12.2		9.0	7.6	9.7
Employed Persons ¹ 16 years old and over	614,055	163,831	98,641	50,145	15,045
Median Family Income ¹	9,187		7,512	3,737	5,721

TABLE 1.2 GENERAL DEMOGRAPHIC INFORMATION, CALIFORNIA, 1970.

CALIFORNIA	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN
¹ Population	19,957,304	4,586,998	3,101,589	88,271	1,397,138
Secondary School ² Student Enrollment	4,380,478	1,103,132	676,527	14,660	412,945
Post Secondary ³ Student Enrollment	562,210	72,744	35,065	5,362	32,317
Median School Years Completed ¹ Persons 25 years old and over	12.4		10.6	11.4	11.9
Employed Persons ¹ 16 years old and over	7,484,690	1,512,675	1,007,153	55,392	450,126
Median Family Income ¹	10,732		8,791	7,952	7,484

TABLE 1.3 GENERAL DEMOGRAPHIC INFORMATION, COLORADO, 1970.

COLORADO	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN
¹ Population	2,207,259	360,853	286,467	8,112	66,274
Secondary School ² Student Enrollment	502,003	89,366	69,335	1,057	18,974
Post Secondary ³ Student Enrollment	81,348	6,863	4,278	736	1,849
Median School Years Completed Persons 25 years old and over ¹	12.3		8.6	na	12.4
Employed Persons 16 years old and over ¹	825,776	na	83,898	na	21,121
Median Family Income ¹	8,462		6,030	na	8,921

na - not available

TABLE 1.4. GENERAL DEMOGRAPHIC INFORMATION, NEW MEXICO, 1970.

NEW MEXICO ²	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN
¹ Population	1,015,998	497,711	407,286	70,986	19,439
Secondary School ² Student Enrollment	258,212	121,729	98,082	17,635	6,012
Post Secondary ³ Student Enrollment	29,117	6,742	5,564	613	565
Median School Years Completed ¹ Persons 25 years old and over	12.2		9.7	8.1	10.9
¹ Employed Persons ¹ 16 years old and over	322,837	154,462	111,697	37,840	4,925
Median Family Income ¹	7,849		6,057	4,327	5,204

TABLE 1.5 GENERAL DEMOGRAPHIC INFORMATION, OKLAHOMA, 1970.

OKLAHOMA	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN ²
¹ Population	2,559,175	304,206	36,007	97,179	171,020
² Secondary School Student Enrollment	455,754	73,765	4,779	21,266	47,720
³ Post Secondary Student Enrollment	79,236	8,078	432	3,569	4,077
¹ Median School Years Completed Persons 25 years old and over	12.1		12.0	10.3	10.2
¹ Employed Persons, 16 years old and over	928,031	119,481	10,581	61,033	47,867
¹ Median Family Income	7,725		7,571	5,446	4,529

TABLE 1.6 GENERAL DEMOGRAPHIC INFORMATION, TEXAS, 1970.

TEXAS	TOTAL	MINORITY TOTAL	SPANISH AMERICAN	AMERICAN INDIAN ⁴	BLACK AMERICAN
¹ Population	11,195,416	3,472,755	2,059,671	17,231	1,395,853
Secondary School ² Student Enrollment	2,468,283	922,868	521,179	3,502	398,187
Post Secondary ³ Student Enrollment	284,189	46,187	22,054	1,851	22,282
Median School Years Completed ¹ Persons 25 years old and over	11.6		7.2	11.2	9.7
Employed Persons ¹ 16 years old and over	4,141,529	709,325	600,425	61,033	47,867
Median Family Income ¹	8,490		5,897	7,282	5,334

TABLE 2.1 ALLIED HEALTH WORKERS IN ARIZONA BY RACE, SEX AND OCCUPATION, 1970¹

APPENDIX I

	All		Black American		Spanish American		Indian American	
	Male	Female	Male	Female	Male	Female	Male	Female
Dental Assistants	18	824	--	--	--	106	--	--
Dental Hygienists	5	133	--	--	--	--	--	--
Dietitians	11	186	--	4	6	10	--	--
Clinical Laboratory Technology and technicians	345	677	26	35	49	43	--	--
Health Aides Except Nursing	161	748	6	26	15	70	--	--
Health Record Technologist and technicians	--	72	--	--	--	5	--	--
Health Trainees	--	13	--	--	--	--	--	--
Health Technologists and technicians, n.e.c.	218	255	3	4	37	48	--	--
Lay Midwives	--	--	--	--	--	--	--	--
Nursing Aides, Orderlies, and Attendants	700	4 041	42	381	141	695	--	--
Practical Nurses	29	1 285	4	121	8	163	--	--
Radiologic Technologists and Technicians	156	318	--	10	29	47	--	--
Registered Nurses	154	7 265	20	135	15	540	--	--
Therapists	203	351	3	--	21	16	--	--
Therapy Assistants	10	9	--	5	--	--	--	--
TOTALS	2,010	16,177	104	721	321	1,743	--	--

NOTE:
1970 Census Data (Detailed Characteristics Series and Subject Reports: American Indians) did not include a survey of Indian health-workers.

TABLE 2.2 ALLIED HEALTH WORKERS IN CALIFORNIA BY RACE, SEX, AND OCCUPATION 1970¹

	All		Black American		Spanish American		Indian American
	Male	Female	Male	Female	Male	Female	
Dental Assistants	308	12 962	11	318	36	1 362	
Dental Hygienists	153	1 694	4	21	13	61	
Dietitians	321	2 748	52	277	63	206	
Clinical Laboratory Technology and technicians	4 465	8 671	384	474	484	573	
Health Aides Except Nursing	2 278	11 316	280	876	296	1 354	
Health Record Technologist and technicians	138	1 053	--	58	28	75	
Health Trainees	111	745	--	76	16	22	
Health Technologists and technicians, n.e.c.	3 395	3 512	265	391	290	292	
Lay Midwives	5	25	--	4	--	--	
Nursing Aides, Orderlies, and Attendants	8 908	50 386	1 702	9 581	1 383	7 304	
Practical Nurses	985	21 545	246	5 241	165	2 431	
Radiologic Technologists and Technicians	2 289	3 433	245	256	244	264	
Registered Nurses	2 986	83 948	379	5 635	401	6 192	
Therapists	3 310	5 763	302	258	281	363	
Therapy Assistants	114	261	29	22	23	59	
TOTALS	29,766	208,062	3,899	25,488	3,753	20,558	

TABLE 2.3 ALLIED HEALTH WORKERS IN COLORADO BY RACE, SEX, AND OCCUPATION, 1970¹

	All		Black American		Spanish American		Indian American
	Male	Female	Male	Female	Male	Female	
Dental Assistants	18	1 125	--	34	--	90	
Dental Hygienists	17	174	--	--	--	5	
Dietitians	32	572	--	35	9	89	
Clinical Laboratory Technology and technicians	423	1 428	19	80	41	118	
Health Aides Except Nursing	200	1 422	--	117	46	167	
Health Record Technologist and technicians	14	161	--	--	--	11	
Health Trainees	21	71	--	--	--	6	
Health Technologists and technicians, n.e.c.	377	420	14	36	--	38	
Lay Midwives	--	12	--	5	--	--	
Nursing Aides, Orderlies, and Attendants	191	6 945	37	548	333	1 560	
Practical Nurses	101	2 551	6	242	19	297	
Radiologic Technologists and Technicians	129	558	5	6	--	56	
Registered Nurses	172	10 471	5	247	11	562	
Therapists	41	718	15	42	41	41	
Therapy Assistants	14	50	--	3	9	--	
TOTALS	3,117	26,658	101	1,395	509	3,040	

TABLE 2.4 ALLIED HEALTH WORKERS IN NEW MEXICO BY RACE, SEX, AND OCCUPATION, 1970¹

	All		Black American		Spanish American		Indian American
	Male	Female	Male	Female	Male	Female	
Dental Assistants	3	348	--	--	--	145	
Dental Hygienists	8	40	--	--	12	--	
Dietitians	37	123	--	--	39	36	
Clinical Laboratory Technology and technicians	242	264	5	--	55	79	
Health Aides Except Nursing	122	329	6	7	41	152	
Health Record Technologist and technicians	--	45	--	--	--	14	
Health Trainees	--	4	--	--	--	4	
Health Technologists and technicians, n.e.c.	206	62	5	6	89	11	
Lay Midwives	--	--	--	--	--	--	
Nursing Aides, Orderlies, and Attendants	530	2 155	10	74	413	1 115	
Practical Nurses	58	692	9	22	24	330	
Radiologic Technologists and Technicians	118	92	--	--	20	53	
Registered Nurses	68	3 252	--	36	34	543	
Therapists	122	173	5	--	56	42	
Therapy Assistants	--	5	--	--	--	--	
TOTALS	1,514	7,554	40	145	783	2,524	

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TABLE 2.5 ALLIED HEALTH WORKERS IN OKLAHOMA BY RACE, SEX, AND OCCUPATION, 1970¹

	All		Black American		Spanish American		Indian American
	Male	Female	Male	Female	Male	Female	
Dental Assistants	19	1 022		12		6	
Dental Hygienists	11	106					
Dietitians	24	422	18	71			
Clinical Laboratory Technology and technicians	475	838	21	57	14	8	
Health Aides Except Nursing	188	1 287	13	134	6	12	
Health Record Technologist and technicians	13	151		6		6	
Health Trainees	15	84				16	
Health technologists and technicians, n.e.c.	449	501	33	48	22	5	
Lay Midwives		9		4			
Nursing Aides, Orderlies, and Attendants	1 220	12 716	143	1 742	8	195	
Practical Nurses	65	2 908	5	344		54	
Radiologic Technologists and Technicians	235	400	4	18	7	5	
Registered Nurses	203	8 255	5	291	7	124	
Therapists	302	53	19	26	6	10	
Therapy Assistants	16	12					
TOTALS	3 255	29,237	261	2,753	70	441	

TABLE 2.6 ALLIED HEALTH WORKERS IN TEXAS BY RACE, SEX, AND OCCUPATION, 1970¹

	All		Black American		Spanish American		Indian American
	Male	Female	Male	Female	Male	Female	
Dental Assistants	69	4 624	9	130	8	450	
Dental Hygienists	36	416	--	3	--	32	
Dietitians	178	1 936	47	469	46	154	
Clinical Laboratory Technology and technicians	2 057	4 027	117	398	315	484	
Health Aides Except Nursing	946	4 271	189	1 005	223	615	
Health Record Technologist and technicians	38	515	--	30	6	20	
Health Trainees	79	1 288	24	194	11	179	
Health Technologists and technicians, n.e.c.	1 168	1 402	163	350	204	172	
Lay Midwives	12	31	--	6	--	8	
Nursing Aides, Orderlies, and Attendants	5 184	29 491	1 515	9 305	992	4 995	
Practical Nurses	462	17 199	102	4 100	152	2 236	
Radiologic Technologists and Technicians	937	1 895	27	244	248	313	
Registered Nurses	1 308	37 875	201	3 419	195	2 888	
Therapists	1 245	2 429	137	295	136	149	
Therapy Assistants	59	136	10	13	--	18	

TOTALS

13,778 107,535 2,541 19,961 2,536 12,713

182

TABLE 3. ESTIMATED NUMBER OF BLACK AND SPANISH AMERICANS IN THE TWENTY SELECTED ALLIED HEALTH CAREERS FOR THE SIX SOUTHWESTERN STATES, 1970.^a

STATE	TOTAL	MINORITY TOTAL	BLACK AMERICAN	SPANISH AMERICAN
Arizona	3,791	401	90	311
California	54,320	6,387	3,038	3,349
Colorado	6,594	743	285	458
New Mexico	1,938	527	21	506
Oklahoma	5,498	458	375	83
Texas	23,150	4,600	2,303	2,297

^a For purposes of this Contract Allied Health Careers are defined as:

Medical Technologist	X-Ray Technician
Optometric Technologist	Medical Record Technician
Dental Hygienist	Inhalation Therapy Technician
Radiologic Technologist	Dental Laboratory Technician
Medical Record Librarian	Sanitarian Technician
(Medical Records Administration)	Dental Assistant
Dietitian	Ophthalmic Assistant
Occupational Therapist	Occupational Therapy Assistant
Physical Therapist	Dietary Technician
Sanitarian	Medical Laboratory Technician
	Optometric Technician

NOTE: Usage of the U.S. Department of Commerce Alphabetical Index of Industries and Occupations was required to match the contracts twenty allied health occupations with those identified by the 1970 Census. Indian American health worker data was unavailable.

TABLE 4. ALLIED HEALTH WORKERS IN THE SIX SOUTHWESTERN STATES

SELECTED ALLIED HEALTH CAREERS BY SERVICE CATEGORIES ^b									
All Allied Health Workers ^a	Dental Service	Dietary Service	Diagnostic Services	Radiology Services	Medical Services	Therapeutic Services	Optometric Services	Environmental Services	
33,925 ⁵	1,205	245	1,565	665	275 ^c	741	124		
284,000 ⁶									
45,053 ⁷	1,557	464	3,584	774	987	798	29		
^d	245	133	709	261	126	224			
49,991 ⁹	1,629	957	3,506	607	382	1,551	552	271	
197,006 ¹⁰	6,607	2,186	9,854	3,876	1,205	4,070			
Arizona									
California									
Colorado									
New Mexico									
Oklahoma									
Texas									

^a Current minority group health worker data was unavailable from any of the six southwestern states.

^b Besides describing specialized health care delivery services, the eight service categories are the genres of a variety of health occupations including the twenty identified by the contract.

^c Insufficient data from California prevented the identification of current health workers by service category or occupation.

^d Current data available only for registered health occupations in New Mexico: Dental hygienists; Dietitians, Inhalation Therapists, Medical Laboratory Technicians, Medical Record Librarians; Occupational Therapists, Physical Therapists, and Radiologic Technicians.

TABLE 5. ALLIED HEALTH STUDENT ENROLLMENT IN THE SIX SOUTHWESTERN STATES

	ARIZONA (1972)	CALIFORNIA (1969)	COLORADO (1972)	NEW MEXICO	OKLAHOMA (1972)	TEXAS (1973)
Number of Programs Reported	23	255	121			
Current Program Enrollment				Current allied health student data was not available from New Mexico		305
Male	221		333			1,667 ^e
Female	2,533		2,527			1,972
Total	2,754	25,926	2,860		3,461	
Student -- Race Composition						
Anglo-American	1,545				2,949	1,204
Mexican-American	152				21	296
Black-American	75				266	429
Indian-American	53				182	9
Other	14				43	2
Composition of Student Body						
Secondary	189		465		952	1,972 ^e
Postsecondary	2,329		2,092		1,541	
Adult	140		303		968	

^e This total reflects only secondary school data from 1973. Postsecondary data is available for 1972: 212 programs; 18,291 allied health students; race analysis unavailable.

SOURCES

1. U. S. Department of Commerce, Bureau of the Census. Detailed Characteristics. Series PCCD-O. 1970.
2. U. S. Department of Health, Education, and Welfare, Office for Civil Rights. Directory of Public Elementary and Secondary Schools in Selected Districts - Enrollment and Staff by Racial/Ethnic Group, Fall 1970.
3. U. S. Department of Health, Education, and Welfare, Office for Civil Rights. Racial and Ethnic Enrollment Data From Institutions of Higher Education, Fall 1970.
4. U. S. Department of Commerce, Social and Economic Statistics Administration, Bureau of the Census. Subject Report: American Indians. PC(2)-1F. June, 1973.
5. Allied Health Manpower Survey 1972. Arizona Regional Medical Program, Arizona Health Planning Authority, and the Comprehensive Health Planning Council of Maricopa County and Pima Health System, Inc.
6. California Health Manpower, 1971: California State Plan for Health Statistical Supplement, California State Office of Comprehensive Health Planning.
7. Colorado Health Occupations Manpower Survey, 1972. State Board for Community Colleges and Occupational Education, and the Colorado State Employment Service.
8. New Mexico Regional Medical Program. November, 1973.
9. Oklahoma Health Manpower Needs, 1973-1974. Occupational Training Information System, Division of Research, Planning and Evaluation, State Department of Vocational-Technical Education, (Stillwater, Oklahoma), September, 1973.
10. Allied Health Manpower in Texas, 1970. Texas Health Careers Program and the Governor's Office of Comprehensive Health Planning.
11. Colorado State Board for Community Colleges and Occupational Education. Enrollment Report School year 1971-1972.
12. Oklahoma State Department of Vocational and Technical Education. Enrollment Report School year 1971-1972.
13. Texas Education Agency. Secondary Health Occupations Program Enrollment School year 1973.

APPENDIX M

Comments and Excerpts from HR-3270 if enacted
to be known as "The Career Guidance and
Counseling Act of 1975"

On February 19, 1975, HR-3270 was introduced in the House of Representatives by Congressman Perkins and Congressman Quil. The bill was referred to the Committee on Education and Labor and then relegated to a sub-committee where it languishes. Indications are that it will not be acted upon this year. HR-3270 is a bill to provide for career guidance and counseling plans and programs for States and local educational agencies. If enacted it would be cited as the "Career Guidance and Counseling Act of 1975".

The Concensus of the opinions expressed by the students, counselors, education and administrators in all of the Barriers Conferences included in this study reflect the dire need for career guidance and counseling in the allied health fields. Though this need may be more acute in allied health due to factors discussed in this report, the need is indeed universal. Were a recommendation for proposed legislation to be submitted, the language herein could not be more relevant or eloquent than that already proposed in HR-3270. Section 101 of the bill reads as follows:

"(a) The Congress finds that -- (1) in a period of high unemployment and economic distress, an effective program of career guidance and counseling designed to assist individuals to make sound career decisions must be a national priority, (2) the strength of the Nation rests, in part, upon natural differences in individual talents and upon the freedom of each individual to develop and express these talents in an unique way, (3) the theory underlying career development is consonant with this fundamental democratic value, (4) preservation of the individual's integrity disavows any type of prescriptive career guidance which commits the individual to particular directions, (5) individuals, however, must develop greater awareness of the values society places on different talents and the relative demands for these talents, (6) the following factors, which impinge upon individuals in ways which make the achievement of self-fulfillment increasingly more difficult, demand that attention be paid to the career development of all individuals: (A) the need for knowledge of, and the ability to apply the decision-making process to, every increasing complex career decisions over the lifespan (early childhood throughout adulthood), (B) the demand for human adaptability and responsiveness arising from rapid technological change, (C) increasing national concern with the need to develop all human talent with equal attention to the talents of women and minorities, (D) concern for values, such as acceptance of the importance of all work and meeting one's needs through work, which give meaning to career development over the lifespan, (E) the need for specialized training for occupational entry, reentry, and career progression, and (F) the disenchantment expressed by students who have difficulty relating their education to their present and future career concerns, and (7) all individuals are entitled to support, encouragement, information and assistance in achieving self-fulfillment throughout their life..

(b) It is, therefore, the purpose of this Act to -- (1) initiate, implement and/or improve career guidance and counseling programs and activities for all individuals of all ages in all communities of the Nation, (2) promote an understanding of educational and occupational options among individuals served, and (3) facilitate career development over the lifespan for all such individuals, by means of meeting specific goals in the fields of career guidance and counseling programs and activities, training and retraining of professional career guidance and counseling staff (including counselor educators), and research and evaluation relating to guidance and counseling programs, staff and activities.

(c) It is recognized that achievement of the above stated purpose depends not only on the establishment and continued improvement of career guidance and counseling in the public school system, but also on the continued improvement, expansion; and utilization of similar programs now being provided to out-of-school youth and adults by legislatively established public agencies such as Veteran's Administration, State Employment Services and State Vocational Rehabilitation Services, as well as by a network of other agencies, including private, non-profit and voluntary agencies.

Therefore, it is the intent of this Act to utilize fully these existing resources, on a cooperative, coordinated basis to provide maximal services to the public without duplication and waste, and to provide for use of such funds as may be necessary to carry out the provisions of this Act."

It is obvious that this bill which includes appropriations of \$750,000,000. over the three fiscal years ending September 30, 1978, must be staunchly supported. However, if enacted it must also be effectively monitored. In the State plans submitted under the act, insurances must be made that minorities are properly represented on the State Advisory Committees to include students, parents, members of business, industry and labor, as well as practicing counselors, guidance directors, counselor educators and administrators. The National Advisory Council on Career Guidance also established under the act should also include an appropriate number of minorities carefully selected by the Secretary of HEW to insure that his appointments are not so lofty that they have lost the sense of the ghetto, the barrio or the reservation.